



Student Volunteers With Professor-In-Charge

PROCEEDINGS

INTERNATIONAL CONFERENCE

on
Mitigation of Climate Change:
Law, Policy and Governance

(April 25th-27th - 2014)



Campus Law Centre

University of Delhi
Delhi-110007
(INDIA)
clc.du.ac.in

Editorial Committee

Editor

Professor (Dr.) Usha Tandon

Faculty Members

Ms. Harleen Kaur
Ms. Anju Sinha
Dr. Shashi Bala
Dr. Vandana Mahalwar
Mr. Moatoshi Ao
Ms. Cheshta Dahiya
Mr. Ajeet Singh
Mr. Neeraj Kumar
Mr. Vipul Pankaj Sanghi

Student Members

Mr. Akash Anand
Mr. Rais Ul Haq Mr. Ahmad Sikander
Ms. Bahuli Sharma
Mr. Ashish Mitta
Ms. Harleen Kaur
Ms. Madhavi singh
Ms. Shriya
Mr. Joginder Singh Sehrawat

Campus Law Centre
University of Delhi
Delhi-110007
India

clc.du.ac.in

Copyright © Campus Law Centre



Editorial Committee

Editor

Professor (Dr.) Usha Tandon

Faculty Members

Ms. Harleen Kaur

Ms. Anju Sinha

Dr. Shashi Bala

Dr. Vandana Mahalwar

Mr. Moatoshi Ao

Ms. Cheshta Dahiya

Mr. Ajeet Singh

Mr. Neeraj Kumar

Mr. Vipul Pankaj Sanghi

Student Members

Mr. Akash Anand

Mr. Rais Ul Haq Mr. Ahmad Sikander

Ms. Bahuli Sharma

Mr. Ashish Mitta

Ms. Harleen Kaur

Ms. Madhavi singh

Ms. Shriya

Mr. Joginder Singh Sehrawat

Campus Law Centre
University of Delhi
Delhi-110007
India
clc.du.ac.in

Proceedings

Of

International Conference

On

Mitigation of Climate Change: Law, Policy and Governance

April 25th-27th, 2014



Campus Law Centre

University of Delhi
Delhi-110007

India
clc.du.ac.in



CONTENTS

1. From the Desk of P.I.C. & Conference Director	3
2. Sponsor's Note	7
3. Delegates' Column	8
4. Inaugural Session	15
Welcome Address and Introductory Remarks Professor (Dr.) Usha Tandon Professor-in-Charge & Conference Director	16
Address by Guest of Honour Ms. Pinky Anand Senior Advocate, Supreme Court of India	18
Inaugural Address Hon'ble Mr. Justice Swatanter Kumar Chairperson, National Green Tribunal, Principal Bench, New Delhi	32
Presidential Address Hon'ble Professor (Dr.) Dinesh Singh Vice-Chancellor, University of Delhi	36
Vote of Thanks Professor (Dr.) S.C. Raina Professor, CLC	38
5. Valedictory Session	39
Welcome Address and Closing Remarks Professor (Dr.) Usha Tandon Professor-in-Charge & Conference Director	
Presentation of Conference Report Mr. Moatoshi Ao Assistant Professor & Conference Coordinator	44
Address by Guest of Honour Mr. Sidharth Luthra Additional Solicitor General of India	46



Address by Guest of Honour Professor (Dr.) J.L. Kaul Professor, CLC; Currently Vice-Chancellor, Vikram Univesity, Ujjain	48
Valedictory Address Hon'ble Mr. Justice Arjan Kumar Sikri Judge, Supreme Court of India	53
Presidential Address Mr. Mohan Parasaran Ld. Solicitor General of India	58
Vote of Thanks Mr. S.K. Gupta Associate Professor, CLC	63
6. Welcome Dinner	64
7. Working Sessions	65
Working Session – I Understanding Climate Change Causes	66
Working Session – II Impact of Climate Change: Key Concerns	70
Working Session – III UNFCCC, Kyoto Protocol and Beyond: Key Legal Issues	74
Working Session – IV UNFCCC and International Environmental Principles	77
Working Session – V The Climate Change and International Trade Law and Impact of Climate Change : Key Concerns	82
Working Session – VI The Climate Change and Human Rights Law	86
Working Session – VII Comparative / Domestic Climate Change Law and Policy &The Climate Change and Human Rights Law	89
Working Session – VIII Comparative / Domestic Climate Change Law and Policy	92
Working Session – IX Comparative / Domestic Climate Change Law and Policy	95
8. Summary of Discussions	99
9. Cultural Event	105
10. List of Participants	106
11. Organising Committee	112
12. Program Details	113
13. Glimpses of the Conference	126



1 From the Desk of Professor-in-Charge and Conference Director



Professor (Dr.) Usha Tandon

I am very pleased to place the proceedings of the International Conference on “Mitigation of Climate Change: Law, Policy and Governance”, held at CLC, from April 25th to 27th, 2014, in the hands of esteemed readers. The Proceedings can also be browsed at www.clc.du.ac.in.

I feel privileged to share the proceedings of the Conference before the august community of academicians, judges, practitioners, scientists, experts, policy makers and law makers for wider dissemination of the outcome of the Conference. I am sure, that the proceedings will help understand the nuances of climate law by crystallizing new ideas and conjecturing new theories on the basis of the evidence that has been presented during the Conference.

The International Conference may be remembered for key consensuses among the delegates. First and the foremost, the delegates were unanimous that emerging economies like India and China should act as real game changer than being mere passive participants at the international climate negotiations. It was observed that though in the early days of



international environmental negotiations, especially the climate negotiations, various countries were broadly grouped along a north/south divide, however, in late 1990s, a lots of countries with small economies have grown rapidly, such as India, China and Brazil providing them more confidence at the international platform to negotiate. The Conference noted the assertive position of India at Durban COP, 2011, where India opted to reject the European Roadmap to a new single, legally binding agreement to revive the climate change talks.

There was also unanimity among the delegates that climate change has so far been, primarily, a science and technology issue. They regretted, that the socio-legal aspects of climate-change have been neglected and have not been fully explored. It was argued that this neglect has lead to the violation of human rights, especially, rights to life, health, food, water and housing etc. The Conference emphasised that international human rights institutions and regimes should be mobilized to redress individuals affected by harm induced by climate change. One delegate urged re-structuring of UNFCCC on 'rights based approach' which refers to the 'right of the nature'.

The delegates, however, had divergent views on the principles of Equity, Common But Differentiated Responsibilities (CBDR) and Respective Capabilities on which UNFCCC regime is founded. The Conference noted that some of the countries regard climate change as primarily a question of retrospective responsibility, while others advocate for intra-generational and inter-generational equity. The north and south divide, that climate change was about the responsibility or the solidarity, was discussed among the delegates. The middle path suggested during the Conference was to develop a hybrid narrative which would reconcile moral aspirations with pragmatic constrains by “talking ethically to states interests”. It was also argued that the concept of complex interdependence could become a persuasive rationale for climate law.

The Conference also attracted rapt attention of the delegates on the problems of climate refugees who constitute a special category of victims of human rights violations. The papers presented in the Conference highlighted the inadequacy of legal framework and problems in



good governance of climate migration and emphasized the urgent need to assess the applicability of general international refugee law to 'climate refugees'. It also stressed the need to define the meaning and scope of 'climate refugees' to address their woes by legal mechanism.

It was further, argued that the expansion of globalization over the last few decades has made social security more necessary than ever for people affected by climate change. The question of the role of social protection mechanisms in climate change adaptation and mitigation efforts was debated in the Conference. The delegates agreed that strong Social Security Laws can play a powerful role in reducing vulnerability, enhancing adaptive capacity and absorbing the residual impact of climate change not buffered by adaptation measures.

The above are some of the important socio-legal climate issues debated and discussed in the Conference. It goes without saying that, various global stakeholders have to overcome the fear of being 'first to move', otherwise the mankind will keep facing the frightening prospect of irreversible climate change. The industrialized countries must come forward to help poorer nations protect against climate change impacts. It is truly said, that “climate change is not an overnight phenomenon and countering it would be a constant process and must be continued in the generations to come”.

As the Professor-in-Charge of CLC, I take pride in writing, that the International Conference on climate law has ushered a new era of academic and research involvement of CLC in contemporary legal issues. The International Conference was a great success and was a milestone in the history of CLC, primarily, because of the huge global participation in the Conference. The Conference witnessed the worldwide participation from Singapore, Italy, China, Indonesia, Mauritius, Nigeria, U.K , South Korea, Maldives, Bangladesh, Iran and Nepal. The success of the Conference largely owes to Learned Solicitor General of India, Mr. Mohan Parasaran and University of Delhi for generously sponsoring this prestigious Conference. On behalf of CLC, I express my sincere gratitude to all those who directly or indirectly contributed to the success of the Conference.



The CLC is now gearing up to publish selected papers presented at the Conference in the form of a book. The papers to be published in the book will, of course, have to be thoroughly revised on the lines of the discussion and debate during the Conference. We will be communicating to the authors of the papers selected for publication shortly.

Today, incidentally, is the day when I complete my one year in the office as Professor-In-Charge, though it appears to me that only a few days back I assumed this responsibility. Time runs very fast, quipping at us - Little done and Vast Undone.

Usha Tandon

14th May, 2014



2

Sponsor's Note

मोहन पारासरन
महा-सॉलिसिटर भारत
MOHAN PARASARAN
Solicitor-General of India



Office/Chamber:
27, Law Officers Chamber, Supreme Court of India
Tel. : 23381636, Fax : 23070238
E-mail : mohanparasaran@hotmail.com



It was my great pleasure to sponsor one of the events of the Conference, namely, the Welcome Dinner for the delegates. As I was told that the delegates would also come from many foreign countries, I thought the Conference should meet international standards and that the Campus Law Centre should in no way lag behind other international Law Schools of repute which have sponsors in the form of their own Alumni. I was greatly impressed by the wide ranging topics which were discussed in the 3-day Conference, and the quality of papers presented as well as the ideas and suggestions put forth in the Conference which were of a high order. This was amply evident when I participated at the Valedictory Session. I am of the view that whatever suggestions that have been put forth in the Conference should be well documented and should be presented to the concerned statutory authorities including the Ministry of Environment and Forests which has now also taken over the ambitious project of cleaning the Ganga. I am of the view that these Conferences should be a continuous affair annually, and the University should get sufficient sponsorships from distinguished Alumni. I assure CLC, that as far as I am concerned that I would always support to whatever extent that is possible from my side. I was also happy that the students of the Campus Law Centre showed keen interest and actively participated in all the Sessions and the staff were equally dedicated. In particular I would be failing to mention the role played by Mr. Moatoshi Ao and some of the dedicated students.

I wish CLC all the best in the future as well.

[Mohan Parasaran]

Residence-cum-Office

3, Krishna Menon Marg, New Delhi, Tel. : 23017180, 23017118
R-20, Greater Kailash, Part-I, New Delhi, Tel. : 26224319, 26224765



3

Delegate's Column



The International Conference on Climate change organized by the campus Law Center of the University of Delhi was for me a veritable breakthrough that will have a lasting impact on my research. Professor Usha Tandon was able to gather a host of motivated lawyers coming from a variety of countries and continents who offered key insights into the complex web of legal and policy issues raised by climate change. I am deeply grateful to Professor Usha Tandon and all the Indian authorities, colleagues and student with whom I had the privilege exchange ideas and perspectives on climate change law during three memorable and intense(!) days of working sessions.

Prof. Riccardo Pavoni

*Professor of International and European Law
University of Siena,
Italy*



The International Conference on Climate Change Mitigation, organized by the Campus Law Centre, was an excellent opportunity to keep informed with the latest breakthroughs in international responses to climate change. It gathered a handful of impressive scholars from India and many other countries in Asia and in the world, in the stimulating intellectual environment of one of the best academic institutes in India. It was an unforgettable experience to meet interesting people and learn more about international law and climate change.

Benoît Mayer

*Research Scholar,
National University of Singapore,
Singapore*



I would like to convey my heartiest Congratulations to the Conference authority alongside all concern for arranging such a fantastic assembly of scientist, educationist, researcher, lawyer and distinguish scholar in the Conference entitled "Mitigation of Climate Change: Law, Policy and Governance" from 25th-27th April 2014 . From my point of view as a participant and speaker it went as smoothly and efficiently as could be; everything was where it was needed, when it was needed. The speakers were



engaging and the topics current and meaningful. The venue was also a great choice and the functions were also spot on. Special thanks for all CLC family members did to make my stay in India wonderful. I will bear it in my memory since I alive.

Dr. Md. Redwanur Rahman

*Associate Professor
Institute of Environmental Science, University of Rajshahi,
Bangladesh*



I wish to thank you all for contributing to the success of the Conference entitled “Mitigation of Climate Change: Law, Policy and Governance” held on 25-27th April 2014”. I believe the experience we have had was rich and worthwhile. Beyond the ceremonials I wish to think that we have together achieved the initial role we set ourselves viz. sharing our learning and learning from our sharing. I am grateful to organizer and participants as they have delivered wonderful and informative articles in the Conference.

Dr. Md. Moshir Rahman

*Senior Lecturer
Department of Geography and Environmental Science
University of Development Alternative, Dhaka,
Bangladesh*



I had attended the international Conference of climate change during 25-27th April held by Campus Law Centre, University of Delhi. I was very impressed by the friendly and hospitable people in Delhi. The Conference staff and voluntary students gave me much valuable helps to accommodate myself to the lives in that city. At this Conference, I gave the presentation about China's important measures in mitigating climate change and newly launched regional emission trading system which aroused widespread interests from other persons. It was very interesting and exciting to share academic opinions with other scholars, concerning a wide range of issues about climate change. I also met some new



friends in this Conference and wished to keep close contact with them in the future. So I would like to express my cordial gratitude to the Campus Law Centre, the staff and other persons who gave me kind helps during my short stay in Delhi.

Dr. Liuyong

Professor of Law

*Law School, Zhejiang University of Finance & Economics,
China*



International Conference on “Mitigation of Climate Change - Law, Policy and Governance” has provided a vibrant platform to exchange views on climate change for CLC faculty, foreign university faculty, researchers, public servants as well as students for three continuous days program. Each organizational challenge has been handled efficiently and all of the participants left with a positive impression of this Conference. This speaks volumes for the efforts of Professor Usha Tandon.

Q Man Ban

Research Scholar;

*Hanyang University, Seoul,
South Korea*



I was honored to attend and participate actively in the activities of the Conference with the theme of global issues and become attention of the world community, that is, climate change. I got not only knowledge and information from the experts who came to the event, but also could interact and exchange experiences on a variety of things, both related to the issue of legal education in their respective universities and various things related to the topics of the Conference. My salute goes to Campus Law Center, University of Delhi which has organized the Conference of climate change with full responsibility. Hopefully someday be gathered in the same event and can mutually cooperate in the promotion of science, especially the law".

Saru Arifin

Associate Professor

*Faculty of Law, Semarang State University
Central Java,
Indonesia*



" Most Indonesian is pretty familiar with the amazing atmosphere of India which is shown in movies, but being in India is indeed an incredible experience of a lifetime. And having a conference in Campus Law Centre has become unseparated pair of this experience. The academic professionalism mixed with the cultural sense has given a truly distinct feeling of conference, which means too many things won't let you feel bored on these well-managed three days discussion forum. Success to the Campus Law Centre, University of Delhi"

Dian Agung Wicaksono

And

Wahyu Yun Santosa

Associate Professor

Constitutional Law Department

Faculty of Law

Universitas Gadjah Mada

Bulaksumur, Sleman

D.I. Yogyakarta,

Indonesia



Conference was well organized and the attendance very good. Mum was wonderful especially in the way she coordinated and carried everyone along. The organisers provided the conducive environment for the quality intellectual discourse that we had. The Conference provided opportunity for interaction and net Working. The quality of the papers presented were of international standard . I am equally confident that the objective of the

Conference was largely attained. Surely, all participants benefitted as I did.

Given the opportunity I will attend over and over again. However, the time allotted for some of the Sessions could have been longer to allow for more robust discussions. Once again, I congratulate the organizers for doing a great job.

Dr. Gloria Erinma Orie

Practicing Advocate,

Nigeria



It was an excellent, deliberative and informative Conference with some great speakers and delegates that really put on their thinking caps and actually thought out of the box. From the beginning to the end, I personally gained so much. Though the volume of the shortlisted abstracts for presentation was much, which invariably reduced the time allotted to each presenter, both the content and delivery exceeded my expectations. Despite that, the after presentation interactive Sessions contributed to the effectiveness of the Conference. On the whole, the Conference was worth the attendance. All I have learnt, on practical to mitigate climate change, I have taken back to my country-Nigeria for implementation. I hope to be part of subsequent editions if informed.

Hyginus Uchenna Okoronkwo

*Research Scholar,
Faculty of Law,
University of Delhi,
India*



Climate change and its mitigation is the greatest challenge world is facing today. I found this conference different from rest of the conferences which I attended earlier in the sense that the organisers had taken due care in inviting the presenters right from the freshers who are in the process of learning and gaining and experts who have wide experience in this field. To become a part of this conference was great satisfaction as the conference provided an appropriate platform to consider the effects of climate change and its mitigation efforts at international, national and regional levels. My heartiest congratulations to the organisers for successfully and effectively hosting this conference.

Chandreshwari Minhas

*Assistant Professor
Raffles University
Neemrana, Rajasthan,
India*



This conference touched and torched the conscience of the partners, role players and common peoples to usher the need for the conservation of the Natural Resources. So far the Scientific community provided the scientific orientation about climate change but for the first time in the nation Legal advocacy and concurrent concerns were seeded in the minds of all the participants across the world.

T.SELVARAJ

Assistant Professor

Tamilnadu veterinary and animal sciences university

Krishi Vigyan Kendra - Kundrakudi

Sivagangai district

Tamilnadu,

India



Thank you for hosting such a wonderful and successful international conference. The quality of the speakers and papers were excellent and I really enjoyed the academic exchanges during my paper presentation in the conference. The dinner events in hotel Le Méridien provided outstanding food and atmosphere for the participants to interact.

Dr. Puneet Pathak

Assistant Professor

Centre for Environmental Law

School for Legal Studies and Governance

Central University of Punjab,

India



Conference was very well organized. The selection of the themes, presenters and the Chairs were done very systematically after thorough deliberations. It was indeed an honour to be the part of such a prestigious International Conference. I congratulate the organizers for the success.

Prof. Dr. Rajni Malhotra Dhingra

Dean, Vivekananda Law School

Vivekananda Institute of Professional Studies

New Delhi,

India



Attending the 'International Conference on Mitigation of Climate Change : Law, Policy and Governance' at my alma mater was indeed an enriching experience. The theme of the conference was well chosen and very relevant as it also seeks to arrive at a common consensus and solidarity amongst nations as was evident from the participants from outside the subcontinent. It was indeed an academic exercise imbued with expertise from all fields. I express my sincere thanks to Prof. Usha Tandon and her team for organising this conference and hope that she continues to inspire us through such participation and involvement of legal minds.

Stanzin Chostak

*(Gold Medalist)-Delhi University.
Research Scholar-Jamia Millia Islamia
Delhi,
India.*



I appreciate your hospitality and nice gesture. The International Conference was enthusiastic and grand success. Once again extending my good wishes for future. Thanks to Professor Usha Tandon madam, Dr. Shashi Bala, Moatoshi Ao & all, who took the honour of pride to host this Conference and made it memorable.

Dr. Anil K Dixit

*Assistant Professor
Uttaranchal University
Dehradun,
India*



Campus Law Centre

PROCEEDINGS

of

International Conference on

Mitigation of Climate Change : Law, Policy and Governance

25th - 27th April, 2014

Inaugural Session



Welcome Address and Introductory Remarks **Professor (Dr.) Usha Tandon**

Hon'ble Mr. Justice Swatanter Kumar, Chairperson, National Green Tribunal, Hon'ble Professor (Dr.) Dinesh Singh, Vice-Chancellor, University of Delhi, dear Ms. Pinky Anand, Senior Advocate, Supreme Court of India, Professor Raina, distinguished guests, learned delegates, my colleagues and very dear students, I feel very delighted to welcome you all at the International Conference on "Mitigation of Climate Change: Law, Policy and Governance".

The great day, which CLC has been eagerly waiting for the last so many months, has ultimately arrived. A day to initiate a discourse, among the academicians and others, as to whether climate change has to be accepted, adapted or mitigated; to understand the key actors and political dynamics shaping international environmental politics as climate issues are strongly political and involve questions of power and sovereignty of nations. The Conference aims at learning from each participating country's experiences in complying, domestically, international norms, etc. I take pride to place on record, that the delegates from Italy, Singapore, China, Indonesia, South Korea, U.K., Nigeria, Iran, Bangladesh, Mauritius, Nepal and Maldives have been arrived and are very much present here, at the Inaugural Session, to take part in the climate change dialogue to be initiated soon after this Session.

I am very pleased to welcome our Chief Guest, Justice Swatanter Kumar, who has recently been appointed as the Chairperson, National Green Tribunal, Principal Bench, New Delhi. Before joining the Green Tribunal, His Lordship was a Judge of Supreme Court of India. He had also been the Legal Advisor/Standing Counsel for the Central Pollution Control Board for a number of years and practiced in different High Courts of India. As a Chairperson of NGT, he has passed very many important orders on deconcretization of trees, protection of Rohtang Pass in the Himalayan range etc. We are grateful to Sir that he has spared his valuable time from his extremely busy schedule to inaugurate this Conference.



My happiness and gratefulness know no bounds today to have with us, none else, than our own esteemed Vice-Chancellor, Padma Shree, Professor (Dr.) Dinesh Singh. Our dynamic Vice-Chancellor's vision of an integrated and interdisciplinary model of university education has earned Delhi University as "Best University in India" and has elevated Delhi University's global ranking to 97th as per Global University Rankings 2014. I know our Vice-Chancellor more through his addresses in various meetings and functions of the University, rather than my personal interactions with him. I found one thing which he always stresses in his speeches that is the terrific passion to do the work. He enthuses the audience by saying that once you have identified some goal, be focused on it, forgetting the whole world, until you achieve it. Further, our innovative Vice-Chancellor is also a poet-a motivational poet-. He writes – *matikadiya hoo, sari rat ka jala hoo*, and this *mati ka diya* dares to tell the Sun that it would take care of the world if the Sun refuses to shine. Our Vice-Chancellor's institutional love and passion are not only illustrious, but also infectious. It infected us too. When we started thinking about Campus Law Centre, we found that for the last two decades or so, it has been neglected by the University authorities in terms of space and infrastructure facilities. We have great expectations from you Sir, and sincerely hope that under your judicious and strong leadership, CLC will get its due at the earliest possible. On this occasion, I extend you, Sir, a very warm and cordial welcome.

I am very pleased to welcome Ms. Pinky Anand, the senior advocate, Supreme Court of India. This Harvard returned lawyer, is a very distinguished *alumnus* of CLC. She is very sharp, considerate and pro-active human being. She is an action oriented woman who does not spend time in talking and listening but doing the things and that too rapidly. For me, she indeed, has been an immense source of support to rely on, in the time of need. I revere her for her serious concerns for the *alma mater* and seek her continuous and unceasing support for CLC. I extend you, Ma'am, a very warm welcome on this occasion.

I am also very happy to welcome Professor S.C. Raina, my senior colleague at CLC. I also extend special welcome to the delegates of the Conference who have taken pains to come to CLC from various parts of the world.

We look forward to hear our distinguished dignitaries on the Dias. Once again I welcome you all and wish you lots of constructive and often heated discussions in this already warm weather.

Thank you.



Address by Guest of Honour
Ms. Pinky Anand
Senior Advocate, Supreme Court of India

Justice Swatanter Kumar, Professor Dinesh Singh, Professor Usha Tandon, Ladies and Gentlemen, Climate Change is a serious global environmental concern. It is primarily caused by the building up of Green House Gases in the atmosphere. The global increase in the carbon dioxide emissions are primarily due to fossil fuel use and land use change, while those of methane and nitrous oxide are primarily due to agriculture.

Global Warming is an example of the broader term Climate Change and refers to the observed increase in the average temperature of the air near earth's surface and oceans in recent decades. Its effect particularly on developing countries is adverse as their capacity and resources to deal with the challenge is limited.

Scientific studies have shown that the global atmospheric concentrations of carbon dioxide, methane and nitrous oxide which are the most important Green House Gases, have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values.

Climate change is already having sweeping effects on every continent and throughout the world's oceans and the problem is likely to grow substantially worse, unless greenhouse emissions are brought under control.

The future we want, lies in how plans and strategies are made, processes are formulated, in how new techniques are adopted, embracing new implementation procedures, improvising and developing innovative technology and being able to integrate all activities in such a manner wherein there is unity in diversity. The future, thus lies in having a common vision and joining hands in the achievement of a sustainable future.



NEED FOR SUSTAINABLE DEVELOPMENT

The term Sustainable Development can be referred to as a concept of development while keeping in mind the environment, so as to see that no danger or harm is caused to it due to human activities. While on a normal day the activities carried on in the society aims at economic benefit, when the concept of sustainable development is involved, then there is a cause of concern for the environment, its preservation and protection. The need for sustainable development arises due to the fact that it is the environment through which man derives all the resources from and any detriment caused to the environment can be seen as a threat to the existence of the human species. It is only the nature when harmed can harm back the human race. Keeping this in mind, the first attempt has always been to include care for the environment while trying to attain social, economic and political objectives. Obliteration of ecosystem has been seen all over the world with the extinction of thousands of species, dilapidation of agricultural lands, extreme climatic changes and other alarming changes in the environment which have been noted from time to time. These factors have led to the formation of concepts such as sustainable development which seeks to adopt alternative mechanisms and techniques which are different from the traditional approach, which do not have a harmful effect on the environment and would lead to its preservation rather than its annihilation.

The United Nations Education, Scientific and Cultural Organization in the year 2002 set a goal as the United Nations Decade of Education for Sustainable Development and augmented its effort to compel Governments across the world to adhere to all the aspects of Sustainable development in order to spread awareness and alertness that can certainly be a inordinate step for a sustainable future with equitable growth without causing much impairment to the natural environment.

Therefore, no country can ignore the need for sustainable environment that requires sustainable use, sustainable consumption and sustainable development in order to enrich not only the present generation, but also the future ones.

ANALYZING THE MAJOR TRENDS OF THE ENVIRONMENT IN THE ASIA-PACIFIC REGION

Asia is a diverse continent that incorporates varied regions and cultures. Its assorted nature of all factors leads to a very major impact on the surroundings and the environment. Some of them have a deeper and more significant influence than the others. One of the most crucial of these is the rapid economic development that is taking place in the Asia-Pacific region. Countries like



India, China and Japan have grown to such an extent that their economic standings across the world are being recognized by the major super powers of the world. The demand and supply ratios, the production capacities, the growing global resource draw and the increasing economic and political power of these countries have called for environmental protection and security. The burning of Chloro-Floro-Carbons (CFCs) and other harmful gases has had a traumatic influence on the environment. The development of such industries has taken place without full consideration of their impact on the environment. But, the time has come when countries are realizing the importance of securing the environment which is extremely crucial for the survival of mankind. The Asia-Pacific region is going through a lot of environmental vicissitudes that have been closely observed and noted. Rising sea levels, melting of glaciers, increased flooding and storms, fluctuating temperatures and rain falls, acidification of oceans and rivers, declining quality and quantity of ground water levels are some among numerous. This unstable and unpredictable climate changes calls for adopting energy efficient measures and the development of green technology. The increased population and urbanization in the region further amplifies the pressure on the environment and therefore green reforms are seen to be something that countries are considering.

Therefore, while developing strategies and approaches to address environmental issues for future benefits, it is important that all the major trends which have a deep impact on the environment be carefully analyzed and taken into consideration in order to reach appropriate, viable and effective solutions.

WHY SUSTAINABLE DEVELOPMENT TODAY?

The view that nature exists for human use, primarily as a resource rather than as something only to be admired or contemplated for enjoyment, has underlined most of development thinking. In fact, modernization and belief in progress are defined in terms of human capacities to harness and use nature for mankind's benefit.

The tension, however, increased after intensified environmental damage that has accompanied universal development. It has been felt that the development strategies, often actively supported by international and national development institutions, with their focus on industrialization, urbanization and income growth, failed to screen out policies and programmers that harmed the environment, failed to address the problems of poverty and empowerment and failed to sustain local communities and indigenous people. There is increasing concern that by not acting sustainably, economic progress is being achieved at the expense of such significant damage to



natural resources, environment and social justice that future generation will be worse off than the present one.

These failings of traditional economic development served as the impetus for the Sustainable development movement world-wide. At the international level, the growing concern about the undesirable effects of the traditional economic development policies started in the early 1970s and was reflected in the deliberations and outcomes of a series of international Conferences starting with the United Nations Conference on the Human Settlement held in Stockholm in 1972. This was followed by the World Commission on Environment and Development (the Brundtland Commission) in 1982-1987, the United Nations Conference on Environment and Development (the Earth Summit) in Rio de Janeiro, Brazil in 1992 and the World Summit on Sustainable Development in Johannesburg, South Africa in 2002. These Conferences and their reports, in particular the Brundtland Commission Report, the Earth Charter and Agenda 21 of the Rio Conference, defined and framed the imperatives of sustainable development and enunciated various principles and processes to be followed in operationalizing its objectives and principles including changes to be brought about in existing attitudes and values.

In India, the movement in support of environmental concerns and sustainable development started in the early 1980s, partly influenced by international developments but mainly due to the devastating effects of the Bhopal gas tragedy in 1984.

The Bhopal tragedy was followed by a number of policy statements and legislations in order to meet environmental challenges. Economic reforms and liberalization introduced in 1991 along with the forces of globalization to which the country was now exposed, no doubt accelerated the pace of Gross Domestic Product (GDP) growth but also raised concerns about inequality, poverty, damage to the environment and natural resources.

More than most other industrial activities, mineral extraction tends to leave a strong environmental footprint. The environmental problems associated with mining relate to destruction of land and forests, soil erosion, mine tailings as well as contamination of surface, ground water and air from toxic wastes and ore particles. Although these effects vary between the different types of minerals and the stages of their production, these can have profound impact near the project site, in the neighboring areas as also at the global level (e.g. through global warming).

The environmental impact caused by mining takes three main forms:

- Land disturbance that covers change of land use and land forms, visual impact of an open pit or waste dump and subsidence of the ground surface due to mining;



- Destruction of habitat including flora, fauna, natural watersheds and drainage pattern and of aquifer causing lowering of water table;
- Adverse chemical impacts of improperly treated wastes which cover air pollution due to dust and noxious fumes, water pollution due to surface run off from different areas of mines, waste dumps, seepage from tailings dam etc., effluents including acid mine drainage, associated with many past and present coal and metalliferous mines as also noise and ground vibration due to blasting.

Sustainable development has emerged as an important concern for mankind, following intensified damage to environment and socio-cultural integrity that has accompanied accelerated economic development in many regions of the world in post-World War II years. Mining in this scenario has attracted special attention as more than any other industrial activity, it tends to leave a strong negative impact on environment and society. However, a complete ban on mineral extraction is not a feasible option as modern society and civilization are heavily dependent on minerals and mineral production. The efforts instead should be to limit the negative consequences of mining through the application of the concept and principles of sustainable development to mining operations.

The IPCC report outlines a number of options for tackling climate change and environmental degradation:

- Energy supply: Effective action requires slashing emissions from power plants by effectively phasing out fossil fuel generation by 2100 - except for plants that capture and store their carbon pollution and dramatically ramping up reliance on renewable energy, nuclear power and fossil fuels with carbon capture.
- Transportation: Increased vehicle efficiency, improved transportation infrastructure and better urban planning could help.
- Buildings: The report touts low-energy building codes, retrofits and reductions of energy use for heating and cooling.
- Industry: The energy intensity of the industry sector could be directly reduced by about 25% compared to the current level through the wide-scale upgrading, replacement and deployment of best available technologies.
- Forestry: The report says the most effective policies include reducing deforestation, carrying out sustainable forest management and cultivating new forests.
- Reduce electricity usage around the home : The largest source of greenhouse gases is electric



power generation. To reduce the amount of electricity used in our homes : switch to energy-efficient lighting, improve the efficiency of home appliances, buy energy-efficient appliances when shopping for a new appliance, reduce energy needed for heating, reduce energy needed for cooling.

- Improve vehicle fuel-efficiency: The second largest source of greenhouse gases is transportation. Motor vehicles are responsible for about a third of all carbon dioxide emissions in the U.S. and Canada. Practice fuel-efficient driving, buy a fuel-efficient car, recycle air conditioner coolant, drive less and encourage car-pooling.
- Conserve energy in the home and yard: Yard maintenance contributes significantly to greenhouse emissions. Per hour of operation, a power lawn mower emits 10-12 times as much hydrocarbon as a typical auto. Reduce lawn size, recycle whenever possible, eat locally produced food, eat vegetarian meals, paint your home a light color if you live in a warm climate, or a dark color in a cold climate which can contribute saving up to 5000 pounds of carbon dioxide per year. Choose clean energy options.

ENVIRONMENTAL JURISPRUDENCE IN INDIA

The 46th Amendment to the Constitution of India in 1976 laid emphasis on the inclusion of environmental protection into the mandate of the Constitution. Consequent to this, the Environment Protection Act, 1986 was enacted by the Parliament of India with the preamble to provide for the protection and improvement of the environment'. The Indian judiciary has been able to respond well while dealing with the issues related to environmental protection and promotion of sustainable development.

Due to the non-compliance of its own laws by the State machinery, the Judiciary invented a new method of Judiciary-driven implementation of the regulations in India. The Courts have also done their share by liberally interpreting the various provisions of the Constitution and other statutes towards ensuring social justice. The 'Green Bench' of the Supreme Court developed the Principles of Absolute Liability and Sustainable Development under the broad ambit of environmental considerations as well as innovative techniques like Spot Visits (whereby Judges visit to see the situation first hand) and Expert Committees. These innovations can be classed under two heads-Implementation of Court Directions and Interference in the Working of the Executive.

The concept of applying the principle of 'absolute liability' was first laid down in the case of *M. C Mehta v. Union of India* (1987) 1 SCC 395 wherein it was held that the principle of strict



liability was not applicable to those enterprises engaged in hazardous activities. The Supreme Court in this case also provided that life, public health and ecology are entitled to priority over unemployment and rural poverty.

In *Vellore Citizens Forum v. Union of India* AIR 1996 SC 2718 case the concept of sustainable development was applied for the first time in an Indian case. Justice Kuldeep Singh, who delivered the judgment, had observed that ecological protection and economical development should not necessarily be seen as radically opposite to each other, rather the answer to the balance should lie in sustainable development. With this judgment this principle was adopted to incorporate a customary international law in the Indian environmental jurisprudence. This clearly indicated that there were principles adopted and laws framed according to the developments in the international arena in order to cover all aspects of environmental issues and not merely the interpretation of statutory law as it is provided for in the legislations.

The “Polluter Pay” principle that was developed under the International Environmental Law wherein the polluting party pays for the impairments done to the environment, has been recognized by the Supreme Court of India in the case of *Indian Council for Enviro-Legal Action v. Union of India & Others* AIR 1996 SC 1446

The Court held that “The Polluter Pays Principle means that absolute liability of harm to the environment extends not only to compensate the victims of pollution, but also to the cost of restoring environmental degradation. Remediation of damaged environment is part of the process of sustainable development.” The “Polluter Pays” principle as interpreted by the Court means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental degradation.

In *Rural Litigation and Entitlement Kendra vs. State of Uttar Pradesh*, AIR 1965 SC 652 the question that surfaced was related to the illegal and unauthorized mining harming and rescinding the local environmental system and causing ecological disparity. The Supreme Court after much deliberation ordered the mining work to stop and held that although this would cause economical loss to the laborers but this was a price that had to be paid for protecting and safeguarding the rights of the people to live in a healthy environment with minimal disturbance of the ecological balance and without avoidable hazard to them and to their cattle, homes and agricultural land and undue affection of air, water and environment.

The 86th Law Commission of India's report undertook to study the environmental issues at a call by the Supreme Court for the same. The Commission recommended the setting up of a separate branch of Environmental Courts in each State which courts would consist of three members



who were either sitting/retired Judges of a High Court or had twenty years of experience as member of the Bar, with preference being given to member who had previous experience in environmental issues. Each Court would also have an independent panel of 'Commissioners' who would tender their opinion and expertise on environmental matters and would necessarily be environmental experts. The Courts will have all the powers of ordinary courts of law barring the constitutional power of issuing writs.

These Courts that have been set up, popularly known as the 'Green Courts' have also been criticized because they merely have the powers of a tribunal and not have the emancipated powers as a High Court and also have been condemned for the exclusion of environmental activists from the panel and the constrained latitude of civic involvement in the adjudicatory procedures.

The Bellary region of Karnataka, which is rich in iron-ore, came into focus when the global demand of iron-ore was seen rising pertaining to raised demand by China. It is alleged that the mining in this region is done illegally after paying minuscule royalty to the Government. An interim report of the Lokayukta (anti-corruption ombudsman) of 2008 revealed major violations and systemic corruption in relation to encroachment of forestland, massive underpayment of State mining royalties. The Indian Bureau of Mines allows a maximum mining depth of six meters to prevent environmental degradation. The mines of this region violated such guidelines and exceeded their prescribed limits to extract more iron-ore. The report stated that there have been severe ecological changes due to illegal mining. Certain species of animals, like the sloth bear, has disappeared in the Bellary region. Furthermore, growth of medicinal plants was not witnessed anymore due to such extensive mining. The cycle of rain was deeply affected and the area surrounding the mines was denuded of greenery and had no cultural activity.

Pertaining to such severe repercussions of illegal mining, Supreme Court of India had stopped all types of mining in Karnataka in view of the environmental concerns. Such ban was recently revoked partially for a certain category but with restrictions and conditions of proper compliance with the regulations.

Another State in India, Goa, which boasts of more than 90 mines has also been under critical scrutiny of the Apex Court on the basis of the commission report of Justice M.B Shah which estimates rupees 35,000 Core loss to the exchequer as well as severe environmental degradation and harmful impact on the ecological system due to the illegal mining in the last twelve years. It has been alleged that illegal mining activities have been going on since the year 2000 and all



the mines in this region were functioning without the mandatory permission from the National Board of Wild Life (NBWL) and thirty three out of the ninety mines were within 1.5 kilometers of the wildlife sanctuaries, which is well inside the eco-sensitive zone notified by the NBWL. Failure to curtail illegal mining has caused large-scale destruction of forest and non-forest land, severe air & water pollution, degradation of environment and loss of bio-diversity. The Supreme Court has recently lifted the ban on mining of iron ore but has put an annual limit of 20 million tonnes.

The recent rulings and decisions of the Supreme Court of India show the all-encompassing nature of the environmental jurisprudence prevalent in the courts of law and the consideration of all elements before reaching any final measure in order to check that no factor is under jeopardy, whether it be the environment or the economy and welfare of the nation.

There is a comprehensive architecture of policies, laws and regulations in order to ensure environmental sustainability of mining operations in India. There are environmental policies and legislation generic to all industries including mining; there are also laws and regulations specific to the mining industry. The administrative arrangements for their enforcement tend to be complex because of the division of responsibilities between the central and state Governments and also between the functional agencies such as the mining, forest, environment and health bureaucracies (at both the state and federal levels) and the pollution control boards.

The laws and the regulatory instruments, however, work badly, mainly due to lax enforcement. This has resulted in an aggressive non-Government organization (NGO) or citizens' movement and an assertive and pro-active judiciary mainly responding to the citizens' complaint against environmental degradation caused by private greed, indifferent governance of environmental regulations and administrative sloth. Sometimes the judiciary assumes the role of policy maker and super administrator, actively monitoring the implementation of the relevant laws.

The Constitution of India has specific provisions for environmental protection and these have been amplified by judicial interpretation from time to time. Article 48A introduced by the Constitution (42nd Amendment) Act 1976 provides as a directive principle of state policy that "The State shall endeavor to protect and improve the environment and safeguard the forests and wild life of the country". Article 51A (g) in a new Chapter entitled "Fundamental Duties" imposes the responsibility on every citizen "to protect and improve the natural environment including forests, lakes, rivers and wild life

The Directive Principles of State Policy of which Article 48A is a part are in the nature of policy



prescription though not legally enforceable in a court of law. However, these are being increasingly referred to by the judges as complementary to the fundamental rights.

In several environmental cases, such as *Virendra Gaur vs. State of Haryana* 1995(2) SCC 571 and *M.C. Mehta vs. Union of India* AIR 1988 SC 1037, the Courts have been guided by the language of Article 48A. In, *Sachidanand Pandey vs. State of West Bengal* (AIR 1987 SC 1109, 1114-15), the Supreme Court held that whenever problems relating to ecology are under its consideration, it is “bound to bear in mind” the provisions of Articles 48A and Article 51A(g) of the Constitution.

In fact, in their new found activist role, the courts have gone a step further and have interpreted the fundamental right of right to life and personal liberty guaranteed under Article 21 of the Constitution to include the right to enjoy unpolluted air and water and a wholesome environment. “Environmental, ecological, air, water pollution, etc. should be regarded as amounting to violation of Article 21”, declared the Supreme Court of India in its judgment in the case *Virendra Gaur vs. State of Haryana* in (1995(2) SCC 577). Similar views have been expressed in the several judgments pronounced by various High Courts of the country.

CLIMATE CHANGE AND INDIA'S RESPONSE

National Environment Policy

National Environment Policy, 2006 outlines essential elements of India's response to Climate Change. These, inter-alia, include adherence to principle of common but differentiated responsibility and respective capabilities of different countries, identification of key vulnerabilities of India to Climate Change, in particular impacts on water resources, forests, coastal areas, agriculture and health, assessment of the need for adaptation to Climate Change and encouragement to the Indian Industry to participate in the Clean Development Mechanism (CDM).

Prime Minister's Council on Climate Change

A High Level advisory group on climate change issues has been set up which includes: Government Representatives and Non- Government Members. The Council coordinates National Action Plans for assessment, adaptation and mitigation of Climate Change. It also advises the Government on proactive measures that can be taken by India to deal with the challenge of Climate Change. It will also facilitate inter-ministerial coordination and guide policy in relevant areas.



The National Action Plan on Climate Change (NAPCC)

The National Action Plan on Climate Change (NAPCC) coordinated by the Ministry of Environment and Forests is being implemented through the nodal Ministries in specific sectors/areas. India's first National Action Plan on Climate Change (NAPCC) was released in June 2008, outlining existing and future policies and programs addressing climate mitigation and adaptation.

The plan identifies eight core “national missions” viz. National Solar Mission, National Mission for Enhanced Energy Efficiency, National Mission on Sustainable Habitat, National Water Mission, National Mission for Sustaining the Himalayan Ecosystem, National Mission for a “Green India”, National Mission for Sustainable Agriculture, National Mission on Strategic Knowledge for Climate Change.

Parliamentary Forum on Global Warming and Climate Change

The Forum was constituted for the first time in 2008 and since then has been involving parliamentarians to interact with specialists Working on Global Warming and Climate Change.

Shri Girish Sant, Co-Founder of Prayas, Pune and Coordinator of the Energy Group along with representatives of the Ministry of Environment and Forests and the Ministry of Science and Technology had been invited for giving a presentation on “The Road Map for 20-25% Reduction in the emission intensity of Indian GDP by the year 2020 as communicated by Government of India to the UNFCCC”. About specific plans of the Government in regard to Climate Change, Shri Sant apprised that Government was doing two major things, one the NAPCC and second the low carbon strategy for inclusive growth.

The Members of the Forum have been taking a lot of interest in the meetings by participating in the discussions. Presentations on various subjects relating to Climate Change like: Impact of Climate Change on Agriculture; Population, Resources & Biodiversity with reference to Climate Change; Technology and Climate Change; National Solar Mission and related initiatives under the National Action Plan on Climate Change; National Mission on Sustainable Habitat, etc. have taken place. These give insight into different perspective on the issue of Climate Change and mitigation methods.

Climate Change Action Programme (CCAP)

Various other science initiatives are planned as part of the Climate Change Action Programme (CCAP). These include National Carbonaceous Aerosols Programme (NCAP), Long Term Ecological Observatories (LTEO), and Coordinated Studies on Climate Change for



North East region (CSCCNE). In the NCAP initiative, the Ministry of Environment and Forests will collaborate with the Ministry of Earth Sciences, the Indian Space Research Organization, the Ministry of Science and Technology and other associated agencies to enhance the understanding of the role of Black Carbon in climatic change through monitoring and assess the impacts of black carbon through various modeling techniques.

Indian Network for Climate Change Assessment (INCCA)

Steps have also been taken to increase capacity at the institutional level for conducting research into Climate Change science and making necessary assessments. The Ministry has already set up a network, namely the Indian Network for Climate Change Assessment (INCCA) comprising of 127 research institutions tasked with undertaking research on the science of Climate Change and its impacts on different sectors of economy across various regions of India. INCCA has helped the Ministry put together its Green House Gas (GHG) Emissions Inventories and in carrying out other scientific assessments at more frequent intervals.

Twelfth Five-Year Plan and Climate Change

The Government has a domestic mitigation goal of reducing emissions intensity of Gross Domestic Product (GDP) by 20-25% by 2020 in comparison with 2005 level.

The energy intensity of India's output has shown a declining trend owing to improvements in energy efficiency, autonomous technological changes and economical use of energy. This domestic goal and the objectives of the National Action Plan on Climate Change are proposed to be achieved through a sustainable development strategy under the Twelfth Five-Year Plan. Climate Change Action Programme (CCAP) - a new thematic/umbrella Scheme has been approved by the Planning Commission for implementation during the 12th Five year Plan. The scheme aims at advancing scientific research, information and assessment of the phenomenon of Climate Change, building an institutional and analytical capacity for research and studies in the area of Climate Change, and supporting domestic actions to address Climate Change through specific programmes and actions at the national and state level.

CLIMATE RESILIENT CROPS- THE FUTURE

For thousands of years, farmers, especially women, have evolved and bred seed freely in partnership with each other and with nature to further increase the diversity of that which nature gave us and adopt it to the needs of different cultures. Biodiversity and cultural diversity have mutually shaped one another.

- Strengthened their resolve and set out a timetable to adopt a universal climate agreement by



Every seed is an embodiment of millennia of nature's evolution and centuries of farmers' breeding. It is the distilled expression of the intelligence of the earth and intelligence of farming i2009.

This includes the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius above pre-industrial levels, subject to a review in 2015. It also includes a reference to consider limiting the temperature increase to below 1.5 degrees - a key demand made by vulnerable developing countries.

The Cancun Agreements

The Cancun Agreements form the pillars of the largest collective effort the world has ever seen to reduce emissions, in a mutually accountable way, with national plans captured formally at international level under the banner of the UNFCCC.

The Cancun Agreements, reached on December 11 in Cancun, Mexico, at the 2010 United Nations Climate Change Conference, represented key steps forward in capturing plans to reduce Green House Gas emissions, and to help developing nations protect themselves from climate impacts and build their own sustainable futures. The main objectives include: (i) Mitigation; (ii) Transparency of actions; (iii) Technology; (iv) Adaptation; (v) Forests; (vii) Capacity building; and (viii) Finance.

The objectives also include setting up the Green Climate Fund to disburse \$100 billion per year by 2020 to developing countries to assist them in mitigating Climate Change and adapting to its impacts.

The Durban Agreement

The United Nations Climate Change Conference at Durban in 2011 delivered a breakthrough on the international community's response to Climate Change. All Governments committed in Durban to a comprehensive plan that would come closer over time to delivering the ultimate objective of the Climate Change Convention: to stabilize Green House Gas concentrations in the atmosphere at a level that will prevent our dangerous interference with the climate system and at the same time will preserve the right to sustainable development. The developing countries, especially the poorest and most vulnerable, will need much more support to adapt to the change that is already embedded in the global climate system.

The Doha Climate Gateway

At the 2012 UN Climate Change Conference in Doha, Qatar, Governments consolidated the gains of the last three years of international Climate Change negotiations and opened a gateway to necessary greater ambition and action on all levels. Among the many decisions taken, Governments:



2015, which will come into effect in 2020.

- Streamlined the negotiations, completing the work under the Bali Action Plan to concentrate on the new work towards a 2015 agreement under a single negotiating stream in the Ad hoc Working Group on the Durban Platform for Enhanced Action (ADP).
- Emphasized the need to increase their ambition to cut Green House Gases (GHGs) and to help vulnerable countries to adapt.
- Launched a new commitment period under the Kyoto Protocol, thereby ensuring that this treaty's important legal and accounting models remain in place and underlining the principle that developed countries lead mandated action to cut Green House Gas emissions.
- Made further progress towards establishing the financial and technology support and new institutions to enable clean energy investments and sustainable growth in developing countries.
- So that the world has a chance to stay below an agreed maximum 2 degrees Celsius temperature rise, beyond which even more serious Climate Change impacts will occur, the Governments agreed to find ways to scale up efforts before 2020 beyond the existing pledges to curb emissions.

CONCLUSION

In the backdrop of fast paced economic and social development in the Asia-Pacific region; it will be apt to say that there is going to be a significant impact on the environment. The power lies in how countries are able to adapt themselves and mold and be flexible in order to acclimatize to the changing environmental conditions. Strengthening previously enacted legislations and keeping them updated through amendments, drafting and enacting new legislations from time to time is the key to ensure environmental security. Working towards sustainable development, bio--diversity, friendly processes and improvising on laws related to the environment, is the key towards ensuring a secure future in the Asia-Pacific region and the world at large.



Inaugural Address
Hon'ble Mr. Justice Swatanter Kumar
Chairperson, National Green Tribunal,
Principal Bench, New Delhi

Professor Dinesh Singh, Vice Chancellor, University of Delhi, Ms. Pinky Anand, Senior Advocate, Supreme Court of India, Professor Usha Tandon, Professor-in-Charge, Campus Law Centre, University of Delhi; Dr. S.C. Raina, Professor, Campus Law Centre, University of Delhi, Respected Faculty members of the University, Participants, Delegates, ladies and gentlemen and, most importantly, my dear students.

'Law, Policy and Governance' are simplistic terms. Often held to be the modus through which a civilised state and its citizenry is obliged to adhere to a code of conduct which would empower them to enjoy their rights, fundamental and otherwise, to the best of their abilities while, making sure that such enjoyment does not barge into or infringe the rights of others.

Law, for instance, traditionally came as development to avoid what the famous Social Contract Theorist "John Locke" termed as the 'state of nature'; a state in which each individual enjoyed his right with little regard to others, leading to total anarchy. Hence, Law and Policy are aspects to curb the apprehended damage to state, its citizenry and the society at large.

Governance, on the other hand, relates more to the execution of such law and policy. Law, and policy without proper governance, would hardly solve the object, or the mischief that is trying to be curbed.

However, all of us present here, are aware, that Law is dynamic in nature, changing as per the societies' needs, changing as per the policies that the Government or the state deem fit to be implemented to help the society better. This is because the society, the environment and the needs of the people are ever changing.

Change, ladies and gentlemen, is inevitable. So they say. And it is an accepted fact that everything in this world is dynamic in nature. The climate, being one of them, is no exception. With the advent of industrialisation, of development, a tug of war between economies of the



world, the environment started taking a back seat. Today, climate change is a reality and it must be dealt with head on. In an ideal world, in a world that is healthy, whose inhabitants are in the pink of health, in a world where flowers blossom and rivers run their course to meet the oceans, we would not need such Conferences. But our race, while treating life as a trade-off between environment and development, lost sight of the principles of balancing and sustainable development. We cut trees, built dams, polluted the rivers that we drink from and the air that we breathe, but some where along the line, we forgot what was so aptly described by the great American revolutionist, Martin Luther King, that "For in the true nature of things, if we rightly consider, every green tree is far more glorious than if it were made of gold and silver." Consequently, today we are at the brink of ominous harm to our race. The present generation is a trustee of the environment, having inherited it from our forefathers and to be passed on to the next generation i.e. inter-generational equity. It is only through Conferences like these and the knowledge we imbibe therefrom, that we can prepare ourselves for taking suitable actions against challenges such as managing the environment as well as mitigating and adapting to the many impacts of climate change. Therefore, I must, at the very threshold, congratulate the Campus Law Centre, Delhi University, a leading institution in the field of Law for its efforts in organising this International Conference to address the burning topic of present times, 'Mitigation of Climate Change: Law, Policy and Governance'. The same is deeply appreciated.

'How cunningly nature hides every wrinkle of her inconceivable antiquity under roses and violets and morning dew!'

Ralph Waldo Emerson, the famous American poet, so eloquently put, what we are here to discuss. Despite the fact, the our race has had little or no regard for nature, while industrialisation and development took place at rampant speeds, nature remained beautiful, its true state only visible over comparison of the past. However, now, a time has come that climate change, that global warming has had visible affects on the nature. Our Polar Caps are depleting, our glaciers are melting, due to the pollutants and smoke produced by the industries, black carbon is depositing on mountains, causing further melting of the same.

Recently, we, at the National Green Tribunal, encountered a situation relating to the one of the most significant gifts of nature to mankind in the wide Himalayan range, the Rohtang Pass, which is at a height of 13,500 feet above the sea level. This tourist spot, often termed as the 'Crown Jewel' of Himachal Pradesh, attracts a large number of tourists. Heavy tourism, besides being a boon to the economy of Himachal Pradesh, is also the cause for adverse impacts on ecology and environment of the State. Diverse and devastating impacts were visible on the



melting glacier and were attributable to unregulated and heavy tourism, overcrowding, misuse of natural resources, construction of buildings and infrastructure, littering of waste and other activities associated with tourism. Studies suggested that 40% of the glacial retreat could be attributed to Black Carbon impact and hence Black Carbon emission reduction can lead to near term impact on warming and thus reduce glacier melting. As per the latest reports available, as a country, India emits 534 kilotons of Black Carbon annually with major contributions from domestic usage, burning of crop residues, sugar industry, dung cake burning, vehicles, brick kilns, steel industry and power plants. Dust and Black Carbon from forest fire also accelerate melting of snow and glaciers in the Himalayas. This is because black colour absorbs all colours of light. The light absorbed by the black material interacts with atoms and molecules and converts the light energy into heat energy. This heat energy accelerates melting of glaciers. So much so, that the Parbati Glacier in the Kullu Valley of Himachal Pradesh has been receding at the rate of 52 metres per year based on a study from 1990 to 2001

The Tribunal, in a landmark judgment in *Durga Dutt v. The State of Himachal Pradesh and Ors.*, addressing this issue, laid down guidelines for tourism, setting up a green tax fund, curbing the vehicular pollution and Black Carbon emission, shifting to bio-degradable waste etc, in order to better preserve the nature, environment and atmosphere of the pristine glacier. However, the problem is a lot larger than a single issue.

As per the Second national Communication submitted by India to the UNFCCC, it is projected that the annual mean surface air temperature rise by the end of the century ranges from 3.5 c to 4.3 c whereas the sea level along the Indian coast has been rising at the rate of about 1.3 mm/year on an average. These climate change projections are likely to impact human health, agriculture, water resources, natural ecosystems, and biodiversity. These are serious statistics. And what should concern us further is, that this is just the tip of the ice berg. The impact of climate change and global warming is even more evident in other parts of the world. According to NASA, Global sea level rose about 17 centimeters (6.7 inches) in the last century. The rate in the last decade, however, is nearly double that of the last century. All three major global surface temperature reconstructions show that Earth has warmed since 1880. Most of this warming has occurred since the 1970s, with the 20 warmest years having occurred since 1981. Even though the 2000s witnessed a solar output decline resulting in an unusually deep solar minimum in 2007-2009, surface temperatures continue to increase. The Greenland and Antarctic ice sheets have decreased in mass. Data from NASA's Gravity Recovery and Climate Experiment show Greenland lost 150 to 250 cubic kilometers (36 to 60 cubic miles) of ice per year between 2002



and 2006, while Antarctica lost about 152 cubic kilometers (36 cubic miles) of ice between 2002 and 2005. The Arctic has been heating up, and studies show that is happening at two to three times the global average. This rising temperature in the Arctic has served to reduce the region's floating ice layer by more than 20%. And as you would expect, when the reflective ice and snow layer is stripped away, it leaves a dark blue sea.

Now, what does the effect of the dark blue sea being exposed have on the Arctic area? Well, the ice and snow layer reflects the majority of the sun's rays harmlessly back into space. But the dark blue of the exposed sea absorbs the rays, aiding the heating process.

These are just some of the instances which show as to how Global Warming and Climate Change is menacing not just the quality of life around the globe, but by virtue of its magnitude, the very existence of life on planet earth.

The need of the hour is to device policies, and as stated previously, implement them through clear, unambiguous laws and good governance to slow down the rate of climate change as much as possible, keeping concepts of sustainable development, intergenerational equity and doctrine of balancing at the very centre. I sincerely feel, that the next age of legal and economic developments should and will be, with the interests of environment at heart. As Francis Bacon, the famous English author and jurist once said 'Nature, to be commanded, must be obeyed'.

I hope that this remains the mantra of the times to come, while congratulating Campus Law Centre for organising a Conference on an issue of such grave significance.

Thank You



Presidential Address
Ho'ble Professor (Dr.) Dinesh Singh
Vice-Chancellor, University of Delhi

Justice Swatanter Kumar, Ms. Pinky Anand, Professor Raina, Professor Tandon, delegates, faculty and students, I congratulate Campus Law Centre for making this effort to organise three day International Conference attracting remarkable participation from across the world.

This is the second time that I am meeting Justice Swatanter Kumar. I met him first when he was a Supreme Court judge in one of the functions here at the Law Faculty. I am grateful to the justice that he spared his precious time to visit the Law Faculty to interact and motivate the faculty and students who have to join and serve the noble legal profession.

Ms. Pinky Anand has a multifaceted personality. One of the things that has delighted me in last two or three years about Pinky is her concern for the institution of University of Delhi. In all my discussion with her, she has unsparingly given her time and devoted her energy into the well being of this University. Even now on the dais she did not lose the opportunity to check with me on some of our concerns of the university. As she is concerned about the University, I wish to let the students and audience here to know that the Law Faculty is receiving an undivided attention of the University of Delhi. For its betterment, we are proposing to create facilities and campuses for the Law Faculty. I have already initiated the move.

I am really not an expert on the climate or environment, I am just a concerned citizen. But as a University person and particularly as a Vice Chancellor, I am delighted that Professor Usha Tandon devoted her formidable energies and efforts at organising this Conference. Professor Tandon works relentlessly and the only phrase that I can use for her energies is that she pounces upon you repeatedly with her firm or extremely firm requests that they are more like farmans and not like requests. But that is the only way to do things as well and I admire her for that and I am really grateful that, you (referring to Prof. Tandon), organised this Conference here.



It is incumbent on the University particularly the University of Delhi and the Law Faculty to think on such serious matters as climate change. I was discussing with Hon'ble Justice and Pinky, before the event started, that the University needs to move from the platform of theory based learning to the practical aspects of learning. We must devise the practical ways and means of connecting knowledge with the needs of the society, and of the Nation, otherwise the universities will die a natural death. We are not here to produce only graduates, we want to imbibe in them knowledge that can be translated into meaningful action. I would urge the Law Faculty to do two things- one, to include in its program and activities other streams of thought that emanate from various disciplines within the University and that connects the needs of society. Further, I would like the Law Faculty to streamline some of its programs and activities at our undergraduate level into our various college programmes and the subject of Environment is certainly one of most important things on the agenda.

It is not enough just to make the law and to study a law and we must devise ways and means to understand-Is this law effective? What can be added to supplement and compliment the law? etc.-. Apart from an awareness and keenness to do things, we have to ponder over as to how law connects with different disciplines that have a bearing on society and I hope this Conference will lead to some of that.

I will have to seek your permission now to leave, as I am required to be present at the Rashtrapati Bhavan in a very short while, but I must mention that I am really delighted and grateful to Professor Tandon that she could organise this great event and to the Justice and Pinky for sparing time.



Vote of Thanks
Professor (Dr.) S.C. Raina
Professor, CLC

Honourale Mr. Swatantar Kumar is the prominent judge being the Chairperson of the National Green Tribunal and therefore he has a lot of responsibilities. In spite of his extremely busy schedule he has given his precious time to come to us. We are thankful to him for that.

Equally our Vice Chancellor has been an environmental changer in the academic pursuits and he is the most appropriate guest to be present on the right side of the academicians. We are thankful for his presence. Ms Pinky Anand is again an environmental changer in politics. We are thankful for her esteemed presence. We are also thankful to Professor Usha Tandon to be energetic enough to conduct back to back Seminars, none National on Gender Justice and this International Conference on Climate Change.

We are also thankful to the delegates national and international who have participated as without their participation this Conference cannot be a success. And I hope that this Conference will bring out some suggestions and resolution which can be helpful to the development of environmental law.

Thank you.



Campus Law Centre

PROCEEDINGS

of

International Conference on

Mitigation of Climate Change : Law, Policy and Governance

25th - 27th April, 2014

Valedictory Session



Welcome Address and Closing Remarks
Professor (Dr.) Usha Tandon
Professor-in-Charge & Conference Director

Hon'ble Mr. Justice Arjan Kumar Sikri, Judge, Supreme Court of India, respected Mr. Mohan Parasaran, the learned Solicitor General of India, respected Professor J.L. Kaul, Vice-Chancellor, Ujjain University, dear Sidharth Luthra, Additional Solicitor General of India, Mr. S.K. Gupta, delegates, my colleagues and dear students, I am delighted to welcome you all, again, this time, to the Valedictory Session of International Conference on “Mitigation of Climate Change: Law, Policy and Governance”.

Now, as we conclude this great event, I may say, with conviction, that it has simply been a fantastic and astounding, full three day academic meet, with huge global participation. The Seminar Hall of Campus Law Centre was full with all the delegates and participants not only from abroad but from various States of India as well.

On the opening day, in the Inaugural Session, brief, but highly charged addresses by none else than our Vice-Chancellor- Professor Dinesh Singh, Chairperson, National Green Tribunal- Justice Swatanter Kumar and Senior Advocate- Ms. Pinky Anand set the things in right motion at the very beginning. Now, as I recap the Working Sessions of the Conference, it is with great amount of satisfaction to say that Conference deliberations covering wide range of issues related to climate change were very enthusiastic and productive. As the concerned organizers, our aim was to make the Conference as inclusive as possible. We tried to maintain three levels of presenters- established experts, establishing experts and new aspirants. We had to have included in the discourse not only the experts but also the beginners; otherwise we cannot produce the next generation of experts. I take pride in informing this august house that the Campus Law Centre could provide the launching pad to two of the aspiring delegates.

The presentations and associated discussions and deliberations during the Conference have



been very rich. It was very enriching to listen Professor Riccardo Pavoni from Italy on a viable and unavoidable relationship between climate change and human rights; Benoit Mayer from Singapore on the elusive rationale for international climate law; Dr. Liuyong from China on China's newly launched regional carbon emission trading system; Gloria Erinma Orie from Nigeria on challenges of compliance with the CDM in Nigeria and my friends from Indonesia, U.K., Bangladesh, South Korea, Iran, Nepal, Mauritius, Maldives and from different States of India. I was thrilled to observe that the foreign delegates were quite acquainted with the proactive role of the Indian Judiciary in restoring and maintaining the natural environment. Hon'ble Justice Sikri may be elaborating it further. I am deliberately not touching specific issues discussed by the delegates; as this slot is reserved for my colleague Moatoshi.

Well, life, sometimes, appears to be strange. From one perspective it is nothing else, but a unique combination of opposites-'starting' culminates into 'ending'; 'opening' goes with 'closing' and 'inaugural' is followed by 'valedictory'. Yes, these are departing moments and these departing moments have to be carried out in the ceremonial manner. So we have with us on the Dias the dignitaries of the occasion.

I feel privileged and honored to have with us the most illustrious *alumnus*, Justice Sikri, Hon'ble Judge Supreme Court of India, to close this mega event with his Valedictory Address. Justice Sikri is one of the most prominent and most respected judges of the Supreme Court of India. Known as academic Judge, very recently Justice Sikri has delivered a historical judgment on the third sex, which is one of its kinds in the whole world so far. Today, it was just impossible for Justice Sikri to take out time for this Conference, as I know how busy he happened to be due to taking over of the office by new Chief Justice of India with day-long ceremonies. We are extremely grateful to his Lordship for sparing his valuable time for us. I am a witness of regular visits of Hon'ble Justice to CLC over the last few years. His every visit strengthens us and motivates us to move ahead institutionally. Sir, we salute your sense of belongingness to CLC and I welcome you on this occasion from the core of my heart.

Sometimes wonders do happen. The CLC has been fortunate enough to get the miraculous support from Mr. Mohan Parasaran, the learned Solicitor General of India for sponsoring this prestigious Conference. You (referring to audience) had already enjoyed that grand and magnificent evening which was made possible by Mr. Parasaran. It was just a dream for CLC to provide a luxurious and lavish Conference dinner to the delegates. This dream came true with the efforts and support of Mr. Mohan Parasaran. One of the finest lawyers of the country, this top law officer is known for his quick grasp of briefs and high voltage arguments in the Supreme



Court of India. This belligerent and aggressive lawyer in the court- room; sophisticated and calm person outside court- room, is a very rich man indeed. But he is rich not only in money and wealth but also in generosity. I pray to the Almighty that his association with CLC goes deeper and stronger in the days to come. I extend you, Sir, a hearty welcome on this occasion.

I am very pleased to have with us Mr. Sidharth Luthra, Additional Solicitor General of India, who is like a younger brother to me. I hugely appreciate his long standing association and support to CLC which is always there in all the times-good or bad. His family name has already been associated with CLC. I would like to tell our foreign delegates that every year in the month of January, an International Moot Court competition, in the memory of Mr. K.K. Luthra, is held at CLC. I request all of you, especially, the foreign delegates to send their teams for the competition. I extend you, Sidharth, a very warm welcome on this occasion.

I am very delighted to welcome my senior colleague Professor J.L. Kaul, Vice-Chancellor, Ujjain University who has been kind enough to come here to support this event and make it a success. He has also been kind enough to spare his precious time to chair one of the Working Sessions. He has been my immediate predecessor in the administration of CLC. Now being involved with this Conference, he is not envious but proud of me. I admire his sense of appreciation of junior colleagues. I also welcome Mr. S.K. Gupta and Professor Rajiv Khanna my teachers and *Bhishma Pitamaha* at CLC.

This Conference would have not been possible without the contribution of delegates to whom we are indebted. The student volunteers deserve a special appreciation. They worked enthusiastically all the days. All of my colleagues- seniors or juniors- have done a commendable job in making the Conference a success. Mr. Neeraj Kumar, Assistant Professor, worked continuously and selflessly forgetting Sunday or Monday and day or night for the smooth conduct of Conference; Ms Anju Sinha, Assistant Professor worked flawlessly managing catering, decoration and other works; Dr. Huma Khan worked satisfactorily looking after the registration and related work. Now, I am going to take that name which deserves special mention for the success of the Conference. He is Moatoshi, the Assistant Professor and Coordinator of the Conference, whose sincerity, integrity and hard work have made the Conference at par excellence. I extend to all my colleagues and students a deep and hearty welcome.

Friends, globalization, liberalization and privatization have affected the legal education in India drastically. There is mushrooming of private law schools everywhere and there are National Law Schools also. These law schools charge a hefty amount of money in the name of fee from



the students and then boast to provide them good infrastructure with air conditioned auditorium, seminar halls and class rooms etc. The old law schools like CLC, with the same meager fee from students, have to stand in this crowd, but with raised head. I often wonder as to how to meet this challenge. I find that there are three things which are indispensable for CLC in this scenario and I wind up my address by naming them, namely, *-alumni*, *alumni* and *alumni*. We have great expectations from the *alumni* to meet these challenges and hope that they will not disappoint us.

Thank you.



Presentation of Conference Report
Moatoshi Ao
Assistant Professor & Conference Coordinator

Respected, Hon'ble Lordship Mr. Justice Sikri, Hon'ble Solicitor General of India, Hon'ble Additional Solicitor General of India, Hon'ble Professor J.L. Kaul, Hon'ble PIC, Professor Usha Tandon and Hon'ble Professor S.K. Gupta.

As the coordinator of the conference, it was quite enriching experience for me to be associated with conference. The proceedings went for three long days. However, I will try to make it as brief as possible. Let me allow to read out the proceedings:

1. The Saichen Glacier in Kashmir is melting due to military activities of India and Pakistan. Though, there have only been some deliberations between the two Governments but the issue of climate change is completely ignored.
2. Traditional worship and rituals practiced in India are causing environmental degradation: Instead of practicing the traditional rituals one should worship the nature. People can follow and practice the Ayurveda policy. For instance, people worship peepal tree, and hence, they can grow more tress.
3. The judiciary has tried to resolve the issue of climate change vis-a-vis human rights, however, in most of the nations there is no specific law to mitigate climate change.
4. More research work is needed to resolve the issue of the effect of climate change on right to life of an individual;
5. On the issue of opportunities of investment in Clean Development Mechanisms in Nigeria. There are a lot of opportunities but no driving force to harness them, no political will and setback of corruption;
6. Funding and support is required from developed countries for strengthening and rigorously enforcing EIA in India;



7. In India on the issue of Human Migration, there is no domestic legislation and hence India follows the International Principles of Law. The Supreme Court of India has issued suggestions and guidelines to the Government to enact statutory law on human migration in India;
8. Hybrid narrative needs to be conceived, it would reconcile moral aspirations. Legislation is required by the international community for mitigation of climate change;
9. Proactive role has been played by the Supreme Court of India concerning the Precautionary Principle which was elaborately discussed by the apex court in the case of Vellore Citizens;
10. The Supreme Court of India has been active in protecting green belts in regard to FDI, however, the Legislature needs to enact more stringent laws for the protection of the green belts not only from FDI but from other sectors as well;
11. In order for a fair practice between the donor and the recipient country regarding climate financing it is advised that the term “Climate Financing” should in the first instance be properly defined;
12. People's and judiciary's participation is necessary to include climate change in the third generation of human rights;
13. Polluter Pays Principle is relevant for fixing responsibility in individual cases but it is difficult to charge the states with that.
14. The Government can bring domestic statutes and shape and evolve policies at National Level to help the victims of climate change as a result of technological advancement;
15. India has passed the Food Security Bill in the Parliament which in the alternative suggests that the Government may not be able to provide food in the event of disasters, and also increasing temperatures and change in rainfall is a result of climate change which in turn leads to food deficit;
16. India does not have clearly marked policies for climate change, but there are environmental protection statutes;
17. Post neo-liberal theory is not directly linked with climate change, and the role of the judiciary should be more active and the divide between the public and private areas affected by climate change should be clearly demarcated;
18. More social security schemes should be introduced both in developing and under developed nations and for that political will is indispensably required.



Address by Guest of Honour
Mr. Sidharth Luthra
Additional Solicitor General of India

Honorable Justice Sikri, My senior colleague and elder brother Mohan Parasaran, the Solicitor General, Professor Usha Tandon, Professor J. L. Kaul, Professor Gupta, my teachers, participants and audience, when I started as a student in university in 1984, -that is disclosure of my age- I remember the months of June, July and August, at that time, there was a lovely forest, still lovely but not that dense. It would rain through those months, constant rain, called “monsoon” in this part of the world, and we would always get wet and missed our classes. It was a bonus in 1970's. In the city we had a large city forest. As a child I lived right next to Defence Colony, it was a large forest where I have personally seen wild hare till 1978 -1979. We took down the forest, it would be a fun as a children. You used to sleep on the roof of the house in the peak of summer, only disturbance used to be mosquitoes. It was lovely and cool. You need a blanket at early hour of morning at times, but also interesting was that jackal from forest walking up to our gate and in morning, if you woke up early, you would see a jackal rather than dog outside your gate. The forest is gone. It's no longer as cool as it was and things have changed.

We had a dust storm. A concept called as “aandhi” or “andheri”. A dust storm where everything would get dusty. And we all would be told to rush and close the door, and as children we did what our mother would tell us. We would do that, but the dust would still get in. It would cool down beautifully after that and it would happen every evening. Our mothers would be complaining because they would have to do the cleaning. Although, we would find it good enough because it was nice and cold again. The dust storms are gone. The only “andheri” that I know now of is the “Andheri”, the suburb of Mumbai. There is no “andheri” in this part of the country any longer.

For three days you had some detailed deliberation and I am not getting into the content because A) I missed them B) I understand that the level of discussion have been wonderful, as is always



when a function is organized by the Campus Law Centre.

I must only tell you one thing, which I believe very firmly. A Conference of this nature is important for all of us. It is important that it begins at the Delhi University. It is important that it begins at a place where academicians and thinkers would be of the future and I believe that in India specially, it's time for us that we look at things with a vision which can't come only through bureaucrats or lawyers like us. The vision comes from academicians and thinkers. We should respect those thinkers and academicians and it is wonderful that this Conference has been held here.

Climate change is staring us at the face. It is the most serious danger that we have for the future yet climate change, while it faces both north and south, we need to find a balance. When we think of climate change and we start bargaining to pollute a little more. Three years ago I was holidaying in Norway. We reached a beautiful glacier and the Norwegians had marked its change over the past 200 years. Each year, it had receded further. While its pure and cool water was soothing- a question my young sons asked was a solemn reminder of the change 2 centuries had brought "How many years will it be till the glacier disappears ". I am not here as an angel of doom but it is time for us to wake up and deal with the challenges of climate change and leave behind petty politicking.

To end, there are a few lines from the classic Supreme Court judgment "*Sachidanand Pandey vs. State of West Bengal* [cited as 1987 (2) SCC 295]. A great Red Indian Chief said—

"This we know the earth does not belong to man: man belongs to earth. This we know: all things are connected like the bond which unites one family. All things are connected.

Whatever befalls the earth befalls the sons of the earth. Man did not weave the strand of life: he is merely a strand in it. What he does to the strand he does to himself".

170 years ago, in 1854, the wise Indian Chief of Seattle said those timeless words. Yet though we have woken up in the past few decades, I wonder whether it is enough.



Address by Guest of Honour
Professor (Dr.) J.L. Kaul
*Professor, CLC; Currently Vice-Chancellor,
Vikram Univesity, Ujjain*

Honorable Judge Sikri , Shri Mohan Parasaran Ji ,Mr. Siddharth Luthra ,my colleague and immediate successor Professor Usha Tandon, my colleague Mr. Sunil Gupta ,my senior colleague Prof Rajiv Khanna, very distinguished delegates, who have come to this three day Conference, Ladies and Gentleman ,young friends, student ,Hello to everyone and greetings from Ujjain, “The land of flowers” and “Land of temples” .

I am happy to note that the CLC has organized a three day international meet on “Mitigation of Climate Change; Law Policy and Governance”, w.e.f. April 25-27, 2014. I expect that very distinguished Professors, Policy Planners and other professionals, from across the world in this meet, had added glory to the CLC's entrepreneurship. I am sure, their presentations and other deliberations were an enriching experience. I look forward to the conclusions and recommendations drawn by the CLC team after three days of meaningful and rigorous engagement. I congratulate the CLC for organizing this important and successful event.

I would like to thank the Campus Law Centre, its dynamic Professor In- charge, Professor Usha Tandon for inviting me, as a Guest of Honour to the International Conference and for chairing one of the Sessions. The subject matter of which, some of the simmering kind of things, are happening over the last 100 years down the line have been said by my friend Mr. Sidharath Luthra . The core content of the subject matter lies in the continuity of humanity .In the way things have changed as Mr. Siddharat Luthra gave one example and let me give another example from my home town. There was a time when I would have loved to take a swim on the river at the back of my house but today I will think 100 times because that river is filled with all kinds of filth, shit and so on and so forth. This means things have changed for worse and if there is any kind of such outcome about which we all should be thinking about. We have been thinking



about and we have been doing it for the last couple of decades. How have we being doing it? We have been doing about it through international conferences, international negotiation ,international treaties and so on and so forth. That is precisely the reason that I have opted to speak on a very short and brief topic and the topic would be international environmental law and International law, its interface as it stands today.

Indeed the subject matter chosen for deliberation is extremely important and crucial for enhancing sustainable development, in which respect for environment plays a great role. Its importance also lies in the fact that the discussions on the subject have seen some of bitter discourses between stake holders in the last couple of decades. Indeed such a discord is apparent, because of different orientations and different strategies to meet the environmental needs, between the developed and the developing countries. Perhaps that is the reason, why the last international negotiations on the climate could not result into a consensus. Keeping that in mind, I have in my short presentation opted to look at the interface between environmental negotiations and international law. I have done so particularly for the reason that in the last couple of decades, many international negotiations and engagements on the subject have taken place, which provides continuity to any further engagement in this area. I hope this topic for discussion fits into the agenda drawn by the Organizers. I am just a student of international law and I have come across the environmental law on the side lines, but yet I thought to share something with you on the kind of interface between international laws and international environmental law.

International Environmental Law

Let me first acknowledge that despite the inconsistency and lack of consensus on the appropriate methodology to meet out the environmental crises, the whole humanity has shown a rising concern about environmental degradation and the immense threat it poses to the entire humanity, irrespective of borders. Starting from the Stockholm (1972) to Rio, down to the present, the states, the NGOs, International organizations, civil society, have been forerunners in creating a consensus about the rising environmental disasters in making, whether about atmospheric pollution, marine pollution or global warming. Indeed there is a consensus about meeting the requirements of the present without sacrificing the rights of the future. However, some important considerations must be noted in this regard. Firstly, damages resulting from pollution or environmental disaster are transnational in its impact, though it may be national in making. Secondly, the problem is of such a nature, that it cannot be solved singularly by any state or any international organization or any other agency, thus necessitating an international



consensus, cooperation and follow up action. Thirdly, immense economic considerations, particularly for the developing countries are involved in any international undertaking, they make in environmental negotiations. Fourthly, it is apparent that developed countries want to externalize the environmental costs/burden to developing countries, though they have been largely responsible for environmental pollution.

When we look at the progress made in the development of a consciousness about environmental degradation, one can come across a series of negotiations, engagements, conventions, etc. The negotiations and undertakings in the field of environment degradation have rested on the doctrines of international law in arriving at some or the other end result. Consequently, it may be argued that over the last two decades a distinct kind of international environmental law (IEL) has been established on the sidelines of international law. Post Stockholm (1972) IEL can be culled from dozens of international agreements, conventions, protocols, understandings and declarations. Significantly, NGO's, and non-state actors have come together to cull out treaties, concepts and principles to guide international action in environmental matters. More significantly, each of these conventions, etc. contain differing "language" and "obligations" on the part of stake holders; most certainly leading to the arguments that many of them are non-binding and bereft of a compensation package.

IEL and International Law

Even though international environmental negotiations have rested on classical international law doctrines for eventual outcomes; yet there is a remarkable difference between international law and international environmental law. While the former focuses on rights and liabilities of states and international organizations; the latter involves not only states, but private actors as well as the corporations. The corporations while conducting their operations are bound to follow the local laws; in any environmental accident, their liabilities will be determined by the local law rather than the international law. Incidentally, at the international level, there are no binding legal formulations on these multinational corporations, except that we have a non-binding international code of conduct on multinational enterprises.

Consequently, instead of focussing on classical use of international law in arriving at newer binding agreements, IEL has focussed on prevention, control and redressal of damage. Significantly, the IEL because of its specific nature and content underpins procedures and inducements, rather than negative command and control in influencing and securing compliance with the environmental codes and regulations. Indeed, that is one of the most common dangers to both international law and IEL. Yet, both share a commonality, that of being



'state centric' and imposing 'liabilities', though not of the same genre. However, it must be conceded that IEL agreements have generated consensual standards that are most relevant to the national law; and even national courts have shown deference to these standards in prevention, control and damage techniques (inter-generational equity, polluter pay principle are some of them). Public participation in Environmental Impact Assessment is also very relevant in this regard. Supreme Court of India has recently directed the Indian Government to establish a national regulator on Environment Impact Assessment.

The most important commonality between IL and IEL has been the adoption of techniques of supervision in IEL. Three techniques are Reporting (1974 Marine Convention), Inspection (1989 Bessel Convention), and Standard setting followed by adoption of conventions, regulations and guidelines. Apart from this the sources of IEL has been derived from IL, whether it is in the form of treaties, conventions or declarations. About 25 or so Conventions/Treaties provide environmental standards of varying degrees and structural mechanisms, based on a 'soft law' approach. A dozen or so treaties also reflect on procedural aspects and general underpinnings of IEL. Significant among them are the Environment Assessment Law (1991,2004), Access to Information and Public Participation(1998 Aarhus Convention) and 1998 Criminal Liability Convention.

Significantly, if one was to analyse the IEL, one can easily assume the soft law approach to IEL negotiations. It doesn't have to meet the rigors of treaty law. It can easily reach a consensus and is easily amendable and can be suitably adjusted locally, apart from assuming the consensual approach unlike treaty law procedural requirements. Nonetheless, this approach can be a big step towards concluding binding agreements. Thus it can be seen that the IEL has matured over the years, principally because States have been the authors and beneficiaries, both in terms of drawing and implementing the standards drawn into IEL. However, it is doubtful still, whether some of the important principles of Liability have been interposed in IEL.

IEL, the Shortcomings

Despite progressive maturing of IEL, many shortcomings could be seen in this branch of law. It has been argued, perhaps rightly, that Rio was instrumental in enunciating IEL, but it was short of providing radical changes. Similarly, Kyoto Protocol was not ratified by major Green House gas emitting countries. Same argument can be taken against Johansburg (2002), which stopped short of targeting and time tables; it only reaffirmed commitments, already agreed to.

Another argument which has been taken is that the present content of IEL is reactive rather than pro-active, waiting for the disaster to happen; Chernobyl is an example of this. Perhaps, the



reason for such an approach is that all negotiations are preambled on competitive/combatative style and format rather than a really collaborative approach. This can be seen in the latest engagements, in which developed countries are doing away with 'common but differentiated responsibilities and are asking for equalitarian approach in mitigation'. Mickelson notes: 'IEL has failed to respond to third world's needs meaningfully. These countries are participants rather than active partners in hammering a deal'.

Three reasons have been subscribed for such a state of affairs. (i) Treaty Congestion. (ii) Non-linkage between IEL and domestic requirements, be it health, food, water, livelihood etc. (iii) Severe Shortage of local resources to participate and bargain, as well as to address difficult questions.

Brief Conclusion

In the wake of such a differentiated approach of IEL, the following suggestions have been made from time to time. I would like to repeat these for the consideration of this august house.

Firstly, there is a need of synergy between different MEAs (forming part and parcel of IEL) to avoid conflict and improve their implementation. Indeed such a harmonization is necessary to provide content and meaning to IEL.

Secondly, there is an urgent need for compliance assistance rather than compliance control mechanism provided under the MEAs. Thirdly, local sustainable solutions in light of domestic requirements and domestically available resources should take a priority, even when states are negotiating an international deal. Lastly, public-private partnerships and active public participation in environmental engagements both at domestic and international levels be enhanced and given a due credibility. Even domestic courts need to engage them in finding credible solutions rather than following hammer and stick approach.



Valedictory Address
Hon'ble Mr. Justice Arjan Kumar Sikri
Judge, Supreme Court of India

Good afternoon to you all.

Professor Usha Tandon, Professor-In-Charge, CLC, the learned Solicitor General Mr. Mohan Prasaran, the learned Additional Solicitor General Mr. Sidharth Luthra, my colleague Professor J.L Kaul (who was my classmate in law), Mr. S.K Gupta, my teacher in law Professor Rajiv Khanna, other teachers sitting here, our guests from other countries who are participating in the seminar and, above all and most importantly, my dear students.

Before I come to the topic, let me respond to Professor Tandon's comment that the new law colleges and the law universities have come up with ultramodern infrastructure and air conditioned buildings and halls and we are here sitting in an old fashioned auditorium with minimal facilities. I still remember how this hall was constructed. I was in profession at that time and Professor Mata Din was teaching here. He had come to many lawyers asking for donation so that an auditorium at CLC could be constructed. From the money collected in this manner, this auditorium was constructed. And you (referring to Prof. Tandon) very rightly mentioned three sources which can make it better, viz. *alumni alumni and alumni*. Two *alumnus* are sitting here and you already said that Mr. Parasaran is a rich person, so is Mr. Luthra. Let me tell you (referring to audience) that what is my salary in a month, more than that they get in one appearance in a case. But, not with standing my meagre salary, I would like to contribute something whatever I can. I am an ex-student of SRCC and the SRCC building, canteen, classrooms and the toilets have been remarkably renovated and made air-conditioned. This has been accomplished from the money contributed by *alumni*. I therefore exhort Parasaran and Luthra not only to contribute themselves but be ambassadors for CLC. So let



them start the crusade and after few months when we come in the next Session we find this auditorium in much better condition and certainly, an air conditioned hall.

Coming to the topic, for last three days, you have been discussing on various aspects of climate change and environment and you had the best person who inaugurated the Conference, viz. the Chairman of NGT, Mr. Swatantar Kumar. I remember few years ago when he was a Judge of the Supreme Court and I was judge in the High Court, he had organised an International Conference on environment, and I was closely associated with that, since I was made a member of the organising committee. His experience there and now naturally for last more than a year while working as the chairman of the NGT, he is coming in contact with these conflicted issues day in and day out. I am not going to repeat all what you have already discussed. Professor Kaul has already done his job brilliantly well and given you the International perspective and the approach that has been adopted.

Therefore, my focus will be limited to one aspect, which I, as a Judge, has experienced. It has been said by the earlier speakers that Supreme Court has done a commendable job and there are many path breaking judgments in environmental law. That is one side of the comment. You ask the environmentalists today. You go to those seminars where they speak. You ask Sunita Narain or Medha Patekar. They will say – Supreme Court has not done its job too well. So these are two conflicting and extreme views.

In the mid 1980s, PIL culture started, thanks to Justice Bhagwati. It led to the growth of human rights jurisprudence including environmental issues. And today we are in a situation where there is so much expectation from judiciary by the common man of this PIL and many times a common person believes and feels that Indian Supreme Court and High Courts can do everything and anything. The issues which they want to bring and what they expect from judiciary are such which are not within the domain of the judiciary. After all we have three organs of the State and we always talk of separation of power between judiciary, executive and legislature. Only two days ago I received a copy of letter which was addressed to Chief Justice of India and I quote from there, it says, -“...in a democratic republic where sovereignty is vested not only with the elected representatives but with the people as a whole, the parliamentarians represent only a fraction of people that is 10- 15 Lakhs because in one constituency when an MP is elected the voters may be 1-1.5 million people. Honourable President of India is generally nominated on the wishes of a ruling part but Supreme Court of India represents over 1.25 billion people with exclusive suo moto power granted by the Constitution of India to protect the rights of fellow citizens and ensure that every law passed is equal and for the people and is executed



within the guidelines of national law.” After giving these sermons it says that “the Constitution of India empowers the Supreme Court of India to travel beyond the Constitution, to protect the interests of the nation and to direct and dictate to rectify when the policy are framed.”

Even a student of law understands that this is not the Court's domain and Court cannot do it at all. What I am trying to convey is the extent of expectation of the judiciary of this country. Now these are the aspirations of people of this country from judiciary that whenever there rights are to be protected which includes environmental rights, judiciary will come to their rescue. As I said that we have in our Constitution, the principle of separation of powers which we have adopted and judiciary cannot trample over the area which is earmarked for others. So, we have two extreme views about the performance of the judiciary in environmental matters. Executive feels that the judiciary is overactive and unnecessarily interferes in projects of public importance aimed at development. It is not only in India, in other parts of the world, including in United States and England and even in South Africa and Australia there is such a feeling. Only yesterday as I was reading an article in The Hindu, titled “where should judiciary draw the line” and it discusses the ideology of Professor Waldren, who has argued that empowering judges to decide on the policy issue amounts to disrespecting the democratically elected representatives. Extending this principle logically, it would mean that judicial activism results in upsetting the balance of power in the executive, legislature and the judiciary.

Without entering into this debate any further, I emphasise that we have the jurisprudence created on environmental issues -we have precautionary principle, the public trust doctrine, the principle of eco development and most importantly, which is applied in a given situation, is that of sustainable development viz. development on the one hand and maintaining the ecology on the other hand has to go together. So development should not be at the cost of environment and at the same time we have to see that development takes place for the welfare of the people.

In this scenario when the matter comes before the Court, what happens? There is a project- it may be setting up of an industry, it may be construction of a dam, it may be some electric substation, some power plant, or any such development project. We have legal regime before us. The statutory regimes calls for clearances from so many agencies including environmental clearances. Most of the time, and that is the experience in India that, when the project is underway and almost at the advanced stage, PIL is filed asserting that if this project comes up or if it is allowed to be established, it is going to be doom for the environment. The dilemma of the court is heightened when papers are presented in the court, which include a set of scientific facts, economic and other issues deliberated upon, social and natural consequences thought



about and discussed about the project. On the other hand the person who has filed the PIL, may be a public spirited person who claims to be an environmentalist or an NGO and the position taken by such environmentalists, from their own studies is that the project in question is environmental hazard. A common complaint of the environment camp is that these ongoing projects are predicated on irrational and unrealistic premise. By virtue of their broad view of the problems and sometimes skeptical view, the environmentalists often sound negative. Now these are the two extreme positions taken in a matter. This adds to the dilemma of the Court. The court while examining the particular decision of the administration, whether it is justified or not, in exercise of judicial review can only go into decision making process and not the merits, that are to be left to the policy makers or the administrative bodies. That is the law as the courts are not the policy decision makers. We have to only see whether the decision is constitutionally valid or not. So that is the argument of the State. On the other side, many times what environmentalists are saying also appeals to the Court.

Having said that, we have to keep in mind that environmental issues are human rights issues and let there be some criticism while dealing with these issues that there is a judicial overreach or activism but when it comes to enforcing the human rights or environmental issues, if at all, court has duty to protect the environment and at the same time ensure that development is not affected. It is this delicate balance which needs to be achieved.

It is easy to explain the aforesaid principle in theory. However, when it comes to implementation thereof in a given case, the task of judiciary is far from easy. As Zygmunt J.B. Plater put (Zygmunt J.B. Plater, et al., Environmental Law and Policy: Nature, law and Society, (1992) West Publishing Co. p 2) put it:

“Tradeoff between short-term material welfare and long-term ecology integrity do occur, although environmentalist often argue against false tradeoff decisions where rational alternatives are available. “You have to choose: either economic development, or environmental quality, you can't have both.” That cliché is the classic false tradeoff.”

Each case of environmental issue involves a highly individualized set of scientific facts, economic and political issues, and social and natural consequences. There is, however, a special environmental perspective that provides a common ground for all environmental cases. The positions taken by environmentalists are typically based upon a broadened accounting of the considerations involved in decision making. Almost every environmental case starts in response to someone's decision to do something: new products or technologies; construction projects; the start, continuation or cessation of various programs that affect the physical world.



The people who make these decisions are usually not environmentalists. Indeed, the environmental position often surfaces relatively late in the game long after the planning stage and well into the implementation stage, when citizens finally see bulldozers rolling. A common complaint of the environmental camp is that these ongoing decisions are predicated on irrational and unrealistic narrow grounds. The proposed actions, it is argued, unwisely ignore facts, costs, and impacts on social and natural values that have real importance to the wellbeing of the community. By virtue of their broad view of problems and sometimes skeptical view of benefits, environmentalist often end up sounding negative (Zygmunt J.B. Plater, et al., Environmental Law and Policy: Nature, law and Society, (1992) West Publishing Co. p3). The environmental perspective does not reflexively condemn economic activity; it insists only that decisions to pursue environmentally detrimental activities be made in a way that gives an adequate accounting of the full range of impacts. As President Barber Conable of the World Bank summarized it, “Good ecology is good economics” (Conable, Address to the World Resources Institute, May 05, 1987).

It is, thus, dilemma and to extreme divergent views which are to be balanced and that is the challenge before the Courts while dealing with environmental issues. Reverting back to the Article of Mr. Anirudh Krishnan, the Advocates for restrictive interference by giving the examples of South African Supreme Court decisions, his submission is that it is possible for courts to mentor actions of the other limbs of democracy without actually stepping into their shoes. As per this restrictive interference, the judiciary should not create policies to enforce rights but must require the Government to draw its own policy and submit along with a time table execution. Interestingly, while saying so his Article ends with the following write up:

“The mere risk of judicial over activism cannot be an argument against judicial activism. Judicial activism, keeping in view the ideals of democracy, is, in fact, necessary to ensure that unheard voices are not buried by more influential and vocal voices. Indeed, on most occasions, timely interventions of the judiciary in India – the home of judicial activism – has helped democracy flourish in our country despite repeated failures of the other organs.”

With this hope, I end my address.

Thank you all for listening to me patiently.



Presidential Address
Mr. Mohan Parasaran
Solicitor General of India

A warm good evening to all of you!

Honourable and Respected Justice Sikri, my distinguished colleague Mr. Siddhart Luthra, dynamic Professor-in-Charge of this great Campus Law Centre Professor Usha Tandon, Professor J.L Kaul and my teacher Professor Rajiv Khanna as well, other member of the teaching faculty, delegates for this Conference and dear students, it once again gives me a great pleasure to be back at the Campus Law Centre and today a mandamus has been issued to me and to my colleague Mr. Sidhharth by the Supreme Court(referring to Justice Sikri) to bring about a climate change in this auditorium. We assure you Sir, that we will not commit any contempt.

In fact, I should congratulate the Campus Law Centre for organising this seminal topic for discussion for three days and this topic has been engaging the attention of one and all for so many decades and has now reached globally alarming proportions. But keeping aside this, the issue of climate change actually has a close nexus to the quality of environment. In fact Mr. Luthra rightly pointed out about the old Lodhi road that there used to be real Jackals. Now you only have human Jackals in this country. In fact in my native place, I had seen two, three mountains right from my childhood. They are now completely vanished over the last thirty years. They have slowly been, quarried illegally. I think most of the mined material was exported to Japan and it is after thirty years that now proceedings have been taken against former Chief Minister's son in Tamil Nadu near Madurai.

Climate change, as I said, is one of the most sought after issues in the near past and the ever-growing population and with increase in the advancement of technology, there has been lot of severe degradation of the environment and thus the climate. I was reading an article that even



these mobile phones are primarily responsible for degradation and climate change because of the emission of the electromagnetic waves. Apart from this, rapid unorganised industrialisation in third world countries, endless cars- every family has got now three cars- fulfilling the human desire to commute faster and faster have resulted in the emission of greenhouse gases thereby resulting in what is known as global warming. As a result of global warming the glaciers are melting, as Mr. Luthra was pointing out by Norway example, and as a consequence of that the sea levels are increasing. An extreme form of the impacts of climate change, has been beautifully portrayed in the Hollywood movie “2012”, which all of you would be familiar, I am sure. A detailed documentary as to the impact of greenhouse gases and global warming titled “Inconvenient Truth” also depicts the extreme climatic change that the world is heading towards. With the advent of rising temperatures of the extreme and abnormal weather patterns life for both human beings, animals and plant life has taken an adverse impact.

The growing concerns globally resulted, as all of you have discussed for the past three days, in the UNFCCC and this ultimately led to framing of the Kyoto Protocol and the developed countries were held principally responsible for the current high levels of the greenhouse gas emissions in the atmosphere as a result of more than 150 years of industrial activities and places a heavy burden on developed nations under the principle of CBDR. Therefore, the Kyoto Protocol again was an agreement negotiated by many countries which was actually finalised in 1997 but came into force in 2005. The reason for the lengthy time span between the terms of the agreement being settled upon and the protocol being engaged was due to the terms of the said protocol where at least 55 parties had to ratify the agreement and for the total of those parties emission to be at least 55% of the global production of greenhouse gases. The parties to the protocol have committed cut of emission of not only CO₂ but other gases and I think if they seek to abide by their commitments, things will improve, but so far nothing concrete seems to have happened and participating countries continue emissions above their targets. In terms of the protocol they are required to engage in emission trading i.e buying credits from other participating countries who are able to exceed their reduction target in order to offset, but how is the mechanism Working? I don't think with my limited experience, this mechanism has been working very successfully.

Now, coming to global warming and the Indian scenario, the goals of Kyoto were to see participants collectively reducing emissions of greenhouse gases by 5.2 % below the emission level of 1990 by 2012. In December, 2009 the United Nations Climate Change Conference commonly known as the Copenhagen Summit was held in Denmark. The Conference included



the 15th Conference of the Parties to the UNFCCC and the 5th Meeting of the Parties to the Kyoto Protocol. According to the Bali Roadmap a framework for climate change mitigation beyond 2012 was to be agreed. (that's all everything has to be agreed). Copenhagen Accord was drafted by the USA, China, India, Brazil and South Africa on 18th December 2012. The document recognised that climate change is one of the greatest challenges of the present day and actions should be taken to keep any temperature increase below 2 degree Celsius. Interestingly, however, the document is not legally binding and does not contain any legally binding commitments for reducing the CO2 emissions.

Now given this global scenario, if we focus on India, India's investment in climate change appears to be ramping up domestically as well. The Ministry of Environment and Forest (MOEF) has released a report listing 20 initiatives that the country is undertaking to address climate change at home. These steps come as part of India's larger action plan on climate change. The report mentions reforestation as a priority on India's environmental agenda. A major drive is underway nationwide where 0.8 billion hectares of forest per year, coupled with efforts to improve forest management, conservation and regeneration and to boost local capacity and job creation for some of India's poorest communities. In fact the Supreme Court in one the cases proceeded to appoint a regulator particularly to implement the forest conservation policy under the Forest Conservation Act (FCA) and even though the judgment was pronounced somewhere in 2011, still no regulator has been appointed. The Court had given time to the Government up to April 1st, 2014 and with very great difficulty, I announce that, even up to April 30th, 2014, with the ongoing elections, I think it's going to be difficult for setting up the regulator, and unless such type of regulators are set up, it will be difficult to actually administer the mechanism because the MOEF is not fully equipped to deal with complex regulatory issues.

The MOEF has also sought to offset 11 percent of India's annual emissions, according to its report. The report also touts the Government's recent approval of two of the eight 'missions' that comprise the National Action Plan for Climate Change: the Solar Mission and the Mission for Enhanced Energy Efficiency. The Solar Mission sets a target to install 20 gigawatts of solar capacity by 2020 and 200 gigawatts by 2050. It appears to be the most ambitious solar plan that any country has put forward so far. The mission for Enhanced Energy Efficiency contains initiatives designed to improve the efficiency of energy use across sectors. The Government has said the programme will include a series of mandated efficiency standards for vehicles, buildings and appliances; a market based mechanism to trade energy efficiency certificates and other mechanisms to finance efficiency efforts such as tax exemption and insurance funds. The



ministry also has proposed to create a National Environmental Protection Authority that would monitor and evaluate the implementation of environmental efforts in India. The proposal becomes a part of the new drive in the Ministry to improve the accountability and transparency.

Despite its increasingly proactive engagement on climate issues, India has not waived from its position that equity concerns must underlie the international climate negotiations. The Government insists that, despite a common goal of global climate stabilisation each country has a different responsibility to address the problem. According to a speech delivered by the present Prime Minister, at a press Conference following the G20 Summit in Pittsburgh, Pennsylvania last year, the major responsibility for bringing about climate change is that of the developed countries and they should carry out credible action in order to control emissions. Topping India's agenda have been appeals for more ambitious emission cuts from industrial countries as well as larger commitments to provide financial and technical assistance to the developing world.

“Nearly 200 million Indians live on less than one dollar a day and nearly 500 million do not have access to modern source of energy” according to former external affairs minister Mr S.M Krishna, at a United Nation Roundtable event in New York he called on industrialized countries to cut their carbon emissions “at least 40 percent by 2020” from 1990 levels. We cannot however get away from the fact that unsustainable lifestyles in patterns of production and consumption in the developed world has caused severe climate change. This should not be allowed to be continued. And India has of course taken several measures, entered into several treaties, as pointed out by Professor Kaul.

Coming to the Courts role in mitigation of climate change, in *MC Mehta vs Union of India*, 2001 (2) SCR 698 popularly referred as the CNG Case the Supreme Court has ordered for converting the entire public transport system to CNG. The same has resulted in a greener Delhi. Following the example set by the Hon'ble Apex Court, the Courts in Bombay and Ahemdabad have also ordered for converting public transport system into CNG which emits lesser GHG as compared to conventional fuels. To give effect to the Courts orders, the Government has also had to change and amend its policy to supply adequate gas thereby changing the priorities for supply of Natural Gas.

To conclude, it can be said that several legislations and authorities have been framed for the purposes of ensuring that there is minimal Climate Change. Road transport and emission levels of vehicles are being regulated to achieve the highest global standards. Subsidies are being provided for alternative fuel consumption projects. The Courts have also played a significant and major role in achieving this. We should not forget that Climate Change is not an



overnight phenomenon and countering it would be a constant process and must be continued in the generations to come.

I thank the Campus Law Centre and in particular the Professor-in-Charge Dr. Usha Tandon and all of you for having given me the opportunity to be the last speaker as the last batsman on a Sunday and I wish you all very good luck for future and hope there will really be good climate change both politically and environmentally.

Thank you.



Vote of Thanks

Professor (Dr.) S.K. Gupta

Professor, CLC

It is my great pleasure to propose a vote of thanks. In fact, my task has been made much easier by the Prof- in-Charge because while speaking the welcome address, she has also appreciated the work done by all. So what I do is to follow the footsteps of Chief Justice Beg. I know on one of the leading judgments in labour law, where it was a seven judge bench, and the judge were divided almost, 3 on one hand and 3 on the other hand. Ultimately chief justice Beg who was on the verge of retirement and that happens to be his last judgment, he said I concur with my learned brother justice Krishna Iyer. So, certainly I concur with whatever Prof-in-Charge has said. I thank all the foreign dignitaries and the teachers. I know that teachers have taken a lot of pain. I have been told that some of the teachers and students have worked till 10-11 in the night also. The students body in particular deserves mention because they have worked all day and night to make this Conference a success. So I hope all the dignitaries have enjoyed their stay in Delhi and I hope for their future participation also.



Welcome Dinner

The CLC and the delegates of the Conference had a lavish Welcome Dinner at Hotel Le Meridien on 26th April, 2014, hosted by Mr. Mohan Parasaran, Ld. Solicitor General of India. Besides, the CLC faculty members and student volunteers, the welcome dinner was attended by Hon'ble Mr. Justices Arjan Kumar Sikri, Judge, Supreme Court of India, Justice Swatanter Kumar, Chairperson, National Green Tribunal, and Justice Jayant Nath, Judge, High Court of Delhi. The delegates were also blessed with the presence of His Excellency Mr. Lee Joon-gyu, Ambassador of the Republic South Korea; Col. Je-Man Hu, Military Attaché, Embassy of Republic South Korea; His Excellency Major General Vetsop Namgyel, the Ambassador of the Kingdom of Bhutan; Mr. Tokunbo Falon, Minister (Trade & Investment), Nigerian High Commission, representing His Excellency the Ambassador of Nigeria; Mr. Son Kuswadi, Education Attaché, Embassy of the Republic of Indonesia, representing His Excellency the Ambassador of Indonesia; His Excellency Dr. Arye Kumar Jagessur, the Ambassador of the Republic of Mauritius and Mr. Abrar Hussain Hashmi, Counsellor, representing His Excellency, the Ambassador of Pakistan.

Hon'ble Mr. Justice Abdul Rauf Ibrahim, Judge, High Court of Maldives, Maldives and Hon'ble Mr. Justice Abdulla Hameed, Judge, High Court of Maldives, Maldives were also present during the welcome dinner. Mr. Mohan Parasaran, addressed the audience and welcomed the dignitaries by presenting bouquets. The dinner started at about 07:00 p.m. (Indian Standard Time) and wound up at about 09:00 p.m. (Indian Standard Time). The dinner was indeed marvellous and all the people present had a phenomenal time.





Campus Law Centre

PROCEEDINGS

of

International Conference on

Mitigation of Climate Change : Law, Policy and Governance

25th - 27th April, 2014

Working Sessions



Working Session - I

Friday, April 25, 2014

11:00 a.m. – 12:45 p.m.

Venue: Seminar Hall, CLC

Understanding Climate Change Causes

Chairperson: Professor (Dr.) S.C. Raina, Professor CLC

Rapporteur: Dr. Shashi Bala, Assistant Professor, CLC

The Session started on the first day of the Conference immediately after the high tea of the Inaugural Session in the morning of April 25, 2014, with the introduction of the Chairperson Professor (Dr.) S.C. Raina, Professor CLC by the Rapporteur, Dr. Shashi Bala, Assistant Professor, CLC. The Session began with the keynote address by the Chairperson. The Chairperson instructed that in order to save the time the presenters must highlight their main points, rather than reading the paper, so that time would be available for the question hour Session. The paper reading is prohibited in a conference or seminar because during the learning and the earning process, we should learn while we earn the seminar/conference.

The first paper entitled “Landfills Contributions to Green House Gas Emission on Climate Change—Its Present Status Management in India” was presented by T.Selvaraj, Assistant Professor, Tamil Nadu Veterinary and Animal Science University, Tamil Nadu, India. The main focus of study in his paper was as to how Landfills and Environment are related to each other. On the very first note, he described that Landfills include municipal solid waste, urban and rural household waste, industrial waste and then he explained as to how it produces global warming gases. His specific area of research was methane (CH₄) emission from landfills. Further he explained as to how developing nations are more prone to methane emission in short span of time in comparison with developed countries. The presenter suggested that the solution for landfills problem lies in individual responsibility which can be fixed with the aid of parenting and teaching. Further, they can be used for power generating purposes. He cited the example of Sweden where 46 sites had been used for that purposes. In India too many cities like Delhi, Chennai, Nagpur, etc., are using that mechanism.

The second presenter Ranidipa Ghosh, Law Clerk-Cum-Research Assistant, Calcutta High Court, West Bengal, India, presenting his paper entitled “Renewable Energy: A Recourse to Control Human Induced Climate Change” emphasized that the main driver of global warming is the rising level of carbon dioxide from fossil fuel burnings. She drew the attention of the audience towards the recently concluded COP 19 at Warsaw. At Warsaw the CBDR principle



was further diluted. The parties consented to Nationally Determined Contribution to tackle climate change but it was not clear whether this would be based on CBDR or Equity Principle. Further the concept like 'Loss & Damage Mechanism 'and' Green Climate Fund' were also undermined by the parties to Convention. Towards the end, she cited the project opportunities in the Renewable Energy Sector like rural household electrification, energy for education and health sector, energy for agriculture and commercial sector. A case study on vegetable vendors was also cited by the presenter.

The third paper entitled ' Understanding Climate Change Causes' was presented by Ms. Nellu Kumari Ram, Research Scholar, Tilkamaji Bhagalpur University, India. In her paper, she submitted that earth's climate was dynamic and kept on changing through natural cycle. Therefore, there was a need to act urgently to avoid an irreversible build up of green house gases. She explained the causes for climate change which could be classified into two groups, natural causes (earthquake, volcanic eruption, landslide and tsunami) and human causes (population growth, urbanisation, industrialisation and deforestation). She submitted that making different policies and developing new methodology could help mankind in combating the climate change problem. She further suggested that certain native and ancestors wisdom adaptation could be helpful in the current scenario.

The fourth presenter Mr. Brijendra Nath Singh, Research Scholar, Department of Geography, Faculty of Science, Banaras Hindu University, Varansi, U.P, India, presenting his paper entitled "Global Climate Change: An Analysis" stated that one should live locally but think globally to mitigate the impact of climate change. He also submitted that his paper was a general one and not specific. In his paper, he highlighted the difference between weather (short duration phenomenon) and Climate (long duration phenomenon). He clarified that as far as variables are concerned like humidity, temperature, atmospheric pressure both are on an equal footing. He also mentioned as to how tropical and sub-tropical diseases like malaria, cholera, dengue are related with weather. In the end, he cited various options available to mankind in dealing with climate change like reduction of CO₂ emission, alternative energy solution and re-storing habitats and lastly 3 rs (reduce, reuse and recycle).

The paper entitled "Armed Conflict and Environment: A Study of Jammu & Kashmir State" was presented by Mr. Raies Ul Haq Ahmad Sikander, LL.B. student, Campus Law Centre, University of Delhi, India. In his paper, the presenter explained that how armed conflict between Indian and Pakistani had resulted into damage to the J&K territory. More than million of troops had been deployed by both countries in the region. According to him, during arm-



conflicts, the people, civil society, administrator's attention remains only towards material things i.e. life and property, but environmental aspect are totally ignored by them. Mr. Sikander offered an explanation as to how military operations, military base camps, drills and test fire, armed insurgency in this region are affecting the forest property in the area; how the use of land mines, deforestation, poaching of animals, habitat destruction are affecting the wildlife in the region. The worst concern was on Siachin Glacier. According to a report more than thirty percent of the glacier has been melted since 1984. In conclusion, the presenter recommended that during peace time or war time one must respect the international law, educating military personnel regarding environment, through army manual, demilitarise national park, sanctuaries and Siachin Glacier etc.

The last presenter Mr. Sujit Nirman, B.A. LL.B Student, National Law University, Delhi, India, presented his paper entitled "Industrialization and Green House Gas Emissions – A Comparative Study of North America and Asia". According to the presenter, India should prioritize its strategies in order to strengthen the implementation of existing policies regarding climate change. The main focus of the paper was on the condition and laws with respect to green house emission in U.S.A and India. He submitted that due to industrialization CO₂ emission has increased up to 30% and emission of methane had almost doubled. According to a report published in 2011 in U.S.A, the emission of GH gas has increased 8.4 % from 1990 to 2011. The presenter suggested that in the Indian context, adequate financing, institutional capacity, better vertical co-ordination between centre, state and local Government will be of great significance in dealing with green house gas emission.

At the end of the Session, during the question hour, few important questions were asked to the presenters.

1. **Question** (*Mr. Vijay Prasad Jayshwal, Kathmandu School of Law, Nepal to Ms. Nillu Kumari Ram*): How one can make room for sustainable development in the mindset of Indian people?

Answer (*Ms. Nellu Kumari Ram*): Yes, it is true that there is mass illiteracy in India. Yet, people can follow the Ayurveda policy of growing more & more plants. We can take inspiration from our ancestors as to how they worshiped nature and lived in harmony with nature.

2. **Question** (*Mr. Dian Agung Wicaksono, Faculty of Law, Indonesia to Raies Ul Haq*): Is there any recent negotiation between India and Pakistan to tackle the conflict in J&K region?



Answer (*Rsaies Ul Haq Ahmad*): After independence there were nearly 60 rounds of talk between the two countries. As of now there is no such initiative between two Governments. Both countries are at stalemate. I hope this will satisfy your question.

3. **Question** (*Dr. Gloria Erinma Orie, Practicing Advocate, Nigeria to Randipia Ghosh*): How renewable sources could be made more commercial and effective in use?

Answer (*Randipia Ghosh*) There are 4 renewable energy resources like biomass, hydropower, solar energy and wind energy. Indian Government has started various programmes with respect to each of them like scheme for rural application, programme on recovery of energy or power generation from industrial and commercial waste, small hydro-power programme, national policy on hydro-power development, solar thermal energy demonstration programme etc. In order to encourage investment in renewable energy resources, certain national tariff policy has also been initiated by the Government. But still there are certain obstacles in the way.

4. **Question** (*Dr. Erimma Gloria Orie*) to. *Selvaraj* What is the role of cultural legitimacy in enhancing landfill management and Clean Development Mechanism (CDM) projects in India?

Answer (*T. Selvaraj*,): Landfill management is not only a challenge for the developing country but it is a challenge all over the world. If any project or green conversion project are to be taken, there should be practicable feasibility as to whether it is a profitable or not. Practical feasibility of the project has to be taken all over the world. If you are investing one rupee and you are getting fifty paisa, then it is not worthy. We have to find another alternate. We have to strengthen our R&D. The only solution is that R&D has to be strengthened all over the world.

5. **Question** (*Ms. Shriya, Student, Campus Law Centre to Ms. Nellu kumari Ram*): How does one make room for sustainable development in society like India where there is less development and illiteracy and religious practice e.g. people throw pooja wastes in the river etc. People are getting educated but they are still ignorant what is harming and what is not harming the environment, how do you think that change can be brought in the mindset of the people?

Answer (*Ms. Nellu kumara Ra*,): People can follow and adopt the Ayurveda policy, they can grow more and more plants They should learn to live harmoniously with the nature.



Working Session – II

Friday, April 25, 2014

02:15 p.m. – 04:00 p.m.

Venue: Seminar Hall, CLC

Impact of Climate Change: Key Concerns

Chairperson: Professor (Dr.) Manoj Kumar Sinha, *Director, Indian Law Institute, New Delhi*

Rapporteur: Mr. Vipul Pankaj Sanghi, *Assistant Professor, CLC*

The proceedings of the second Session started with the introduction of the Chairperson Professor (Dr.) Manoj Kumar Sinha, Director, Indian Law Institute, New Delhi, by the Rapporteur Mr. Vipul Pankaj Sanghi, Assistant Professor, CLC. He then introduced the Chairperson citing his illustrious background as an academican. After this, the Rapporteur requested the Chairperson to take over the proceedings of the Session. The Chairperson then initiated the proceedings of the Session by introducing the presenters who were five in number. He then called upon the first presenter, Dr. Md. Redwanur Rahman Associate Professor, Institute of Environmental Science, University of Rajshahi, Bangladesh to present his paper.

The paper of the presenter was titled “Impacts of Climate Change on Fishermen in the Coastal Zone of Bangladesh: A Study after Three Devastating Cyclones.” He started his presentation by giving a background of Bangladesh citing it as a cyclone prone country. The Objective of his research as mentioned by him was to review the impacts of climate change and to assess the loss and damage the country of Bangladesh has suffered. His methodology was mainly based on the interview method of data collection. He then apprised the audience with the fact that one 'SIDR' cyclone was the most devastating one in Bangladesh and the next most shattering one was 'AILA'. He then revealed the impact of climate change on fisheries in Bangladesh, stating that, the rise in the surface temperature, no amenities with the fishermen and fishermen having no knowledge of the climate change, were the main reasons of the impact of climate change on fisheries. He then concluded by saying that Bangladesh is one of the worst hit countries by climate change and the fishermen fall easy prey to it. The Chairperson commented that the efforts made by the Government of Bangladesh and the policy matters initiated could also have formed part of the presentation, to which the presenter replied that though there are laws but there is a lack of implementation.

The Chairperson then called upon the next presenters, Bidyut Bora and Pawan Kumar Bairwa, Research Scholars, School of International Studies, Jawaharlal Nehru University, New Delhi,



India, who had co-authored the paper. Mr. Pawan Kumar Bairwa made the presentation. The paper was titled “Climate Change and its Impacts on Vulnerable Sections in India.” The presenter asserted that poverty is closely related to climate change, as has been observed by various UN reports. He elaborated the concept of 'vulnerability' and that how it is related to climate change with respect to fishermen, women and children, internally displaced persons and labourers. The presenter concluded by saying that there had been no emphasis given on the social and gender aspects of climate change but only on the scientific ones which is not enough. The Chairperson appreciated the presenter for the study of the social impacts of climate change.

The next presenter called upon by the Chairperson was Harshan Tee Pee, PhD Scholar, School of Social Science, Tata Institute of Social Sciences, Deonar, Mumbai and his paper was titled “Vulnerability, Damages and Post-shock Recovery of Natural Disaster: Study of a Village Affected by Cyclone Thane in Cuddalore District, Tamil Nadu, India.” He at the outset stressed that the extreme environmental events have taken a toll on the economy. He, like the preceding presenter also discussed the features of 'vulnerability'. The presenter provided that the impact of disaster on the economy has been colossal, so much so that it has increased fourteen fold from 1950 – 1990. His study claimed that the cyclones in the said village of Tamil Nadu have affected life as well as property and the main loss has been that of the crop as the cyclones hit when the crop was ready for harvesting, specially paddy. Damage was also done to the livestock but relatively less, and that the statistics showed that the income from cultivation was in the negative. The presenter concluded by saying that the disasters had really impacted the economic situation, but he appreciated that MGNREGA has been helpful to a considerable extent in overcoming the impacts of climate change. The Chairperson commented that the Governments now are well prepared before the cyclones, as has been witnessed last year in various States, and this could have been a part of the research of the presenter.

The next presenter called upon by the Chairperson was Mr. Stanzin Chostak, Ph.D. Scholar, Jamia Millia Islamia University, New Delhi, and his paper was titled “ Impacts of Climate Change on Local Livelihoods in the Cold Desert of the Western Indian Himalayan Region of Ladakh.” The presenter started by making a general comment that the mountain areas of India in general are facing environmental degradation. The regime specific inputs of climate change and the issues of vulnerability and adaptation to that were discussed. The presenter asserted that 80% of the population of Ladakh is dependent on natural resources, especially the glaciers, which need to be preserved. Because of the climate change, extreme climatic conditions take place, as during some parts of the year there are cloud bursts whipping out life and property and during



other, because of scanty rainfall there is no grass for the sheep to feed upon who are reared to make Pashmina shawls, and they starve to death, the Changthang village in particular is worst affected. He suggested legal frameworks for territorial problems, and also that there should be legal management of ground water because that has been exploited as a result of the boon of the tourism industry. The Chairperson appreciated that the presentation dealt with some legal issues.

The Chairperson then called upon the final presenter of the Session Dr. Puneet Pathak, Assistant Professor, Centre for Environmental Law, School for Legal Studies and Governance, Central University of Punjab, India, whose paper was titled “Climate Change and Human Rights.” The objective of the research of the presenter was to deal with the question as to how the human rights can mitigate the problem of climate change? He cited the Human Rights Committee Reports on Human Rights and Climate Change with provided that how the right to life was being violated by the impact of climate change. He expressed the concern that if 1° C rise in temperature will result in displacement of 50 million people, then what would be the result of a 5° C rise in temperature? Also that if large number of people are displaced and have to find refuge in some other states, then how will the coordination between the two states would take place? He apprised the audience of the fact that the most vulnerable countries to climate change are: Bangladesh, Cambodia, Mozambique, Zimbabwe, and Maldives, amongst others. One of his observations inter alia, was that the human rights law is well equipped to deal with the equity dimension of climate change. He concluded by saying that the measures which were established from the year 1992 to 1997 would not be applicable in 2014, and for the current era, new methods need to be devised.

Question and Answer Session

1. **Question** *Dr. Gloria Erinma Orie, Practicing Advocate, Nigeria to Bidyut Bora* : I was expecting to see specific reports by the IPCC (Inter Governmental Panel on Climate Change) on people who are vulnerable of 2014 in your presentation. Have you included in your paper?

Answer (*Bidyut Bora*): not consulted the recent reports published in March 2014, so could not reply;

2. **Question** *Dr. Gloria Erinma Orie & Vijay Jayswal, Kathmandu School of Law, Nepal to Puneet Pathak*: What is the attitude of Indian Judiciary in resolving the problem of climate change vis-à-vis human rights? And how has judiciary tackled with the issue of climate change vis-à-vis international humanitarian laws?



Answer(*Pathak*): Judiciary is not a proper forum to tackle the problem of climate change, it is a problem which can be overcome with the collective effort at the regional and international level.

3. **Question** *Hyginus Uchenna Okoronkwo, Research Scholar, Faculty of Law, University of Delhi to Harshan*: To what extent have the local concerns and the developmental intervention been successful to mitigate the disasters in Tamil Nadu?

Answer (*Tee Pee*): Both have contributed to mitigate in their own capacities, also the MGNREGA scheme of the Government has contributed substantially.

4. **Question** *Vijay Jayswal to Mohd. Redwanur Rahman, Associate Professor, Institute of Environmental Science, University of Rajshahi, Bangladesh*: Does the Government provide any alternative job to the affected fishermen in Bangladesh, and whether the Government has a strategy or plan of action to tackle the problem the fishermen are facing?

Answer (*Rahman*): the fishermen themselves shift to Government sectors but there is no action from the part of the Government as such.

5. **Question** *Benoît Mayer, Ph.D Scholar, University of Singapore, Singapore to Puneet Pathak*: How can the issue of human rights be actually related to climate change, giving the example of building a dam, if a dam is built then it might impact the climate and also affect the human rights, but on the other hand it might also be to mitigate climate change and preserve human rights, how to reconcile between the two interpretations?

Answer (*Pathak*): Human rights approach towards the climate change includes a right holder and the possessor of a duty, the combined efforts of the two would help overcome the issue of human rights affected by the climate change.

6. **Question** *Riccardo Pavoni, Professor of International and European Law, University of Siena, Italy, to Puneet Pathak*: Can you provide me the citation from where you had stated that climate change affects the right to life of an individual.

Answer (*Pathak*): The report of the Human Rights Committee of 2004 and the report of the Office of the High Commissioner for Human Rights of 2009 mentions it.



Working Session – III

Saturday, April 26, 2014

10:00 a.m. – 11:45 a.m.

Venue: Seminar Hall, CLC

UNFCCC, Kyoto Protocol and Beyond: Key Legal Issues

Chairperson: Dr. Inderjeet Singh Sodhi, *Head, Department of Public Administration,*
St. Wilfred's Post Graduate College, Jaipur

Rapporteur: Mr. Moatoshi Ao, *Assistant Professor, CLC*

The third Working Session of the Conference started on the second day in the morning of April 26, 2014 with the introduction of the Chairperson, Dr. Inderjeet Singh Sodhi, Head, Department of Public Administration, St. Wilfred's Post Graduate College, Jaipur, by the Rapporteur: Mr. Moatoshi Ao, Assistant Professor, CLC. The Chairperson in his keynote address expressed his firm believe that the Session would lead to more production of information regarding steps, initiative and strategy adopted by various developing and developed countries for the mitigation of climate change. He also articulated that the Session will throw light on the mitigation of climate change on various agreements post the adoption of UNFCCC.

The first paper presenter, Dr. Gloria Erimma Orie, practicing advocate, Nigeria, presenting her paper entitled “the Clean Development Mechanism (CDM) and the Challenge of Compliance with the CDM Rules in Nigeria” broadly discussed the Nigerian constitutional provisions in protecting environment. Highlighting and asserting on the problem of funding and non-domestication of Kyoto protocol in Nigeria, she said, though there has been no legal recognition of DNA rules but the State has taken precautions regarding the CDM. Apart from that, the State also has National policies for the protection of environment viz., Protection of Forest, Prevention of Erosion etc. The main problem, the Speaker found, was not in the application of the Kyoto Protocol but the challenge of funding being unable to woo the investors. Besides, lack of awareness of environment has become a big hurdle for the establishment and domestication of the International Law (Kyoto Protocol) in Nigeria. She also presaged the consequences of non participation of schools, colleges and educational institutions in mitigation of climate change in Nigeria.

The second presenter Mr. Ajay Arora, Research Scholar, JNU, New Delhi, presenting his paper entitled “Revisiting Global Climate Change Negotiations: India and COPs, said that “Climate change is not natural but anthropogenic”. He stressed on the Indian scenario and India's role at



international negotiations on mitigation of climate change. The speaker criticised the policies that the States have taken up, which have been more beneficial for economic growth rather than saving the environment. He firmly fastened his presentation on to Common Heritage Principle and emphasized that the Principle of Equity should be the only basis of management for mitigation of climate change and environment.

The paper entitled “Organization of Petroleum Exporting Countries (OPEC) versus the International Kyoto Protocol in the Persian Gulf Region: Problems and Prospects” was presented by Esmaeil Shahsavandi, an Iranian Ph.D. Scholar from Punjab University. According to him policies and measures (PAMs) to implement the Kyoto Protocol (such as a carbon tax) will cause drastic economic lose to the members of OPEC and hence the developed nations must compensate the members of OPEC. He remarked that while there may be in principle a global gain in the long term-as forgone costs of climate impacts-from policies to implement the Kyoto Protocol, there can be less understanding of the longer term distributional consequences of such policies. He concluded by suggesting that both high and low prices of fossil fuels should be supported by accompanying policies, like, subsidies on research and development, to foster energy transition.

Ms. Chandreswari Minhas, Assistant Professor, Raffles University, Rajasthan, the fourth presenter of the Session, presented a paper entitled “Analysing Kyoto Protocol and its Negotiations Process with Special Emphasis on its Compliance System”. She discussed the flexible mechanisms of post Doha which provides a foundation for shaping efficient climate policies in the future and post 2020. However, she lamented that setting targets for the industrialised countries and timetable of emission reduction is seriously flawed. She also lamented on Government's lack of support and commitment for the protocol. She expressed that the Kyoto compliance system is ineffective and hence suggested that the States should come forward to address Climate change through Kyoto Protocol by detailing on the Working of the Protocol through different measures, enforcement etc as stated in the Protocol.

The fifth presenter Mr. Sidhant S. Kondawar, Assistant Professor, New Law College, Pune, presenting his paper entitled “UNFCCC, Kyoto Protocol & Developing Countries: Human Solidarity in a Divided World” emphasized on the North and South issues in Climate Change through different implementation of laws by the States. He criticised the limited and restricted financial support to developing countries for mitigation, adoption, technology development and transfer. He suggested that capacity building is critical for the success of a new climate change agreement. He was of the opinion that all the States should come together to solve Climate Change as it is global problem.



Last but not the least, the sixth presenter, Professor (Dr.) Rajni Malhotra Dhingra, Dean, Vivekananda Law School, New Delhi presenting her paper entitled “The Kyoto Protocol: An Indirect Benefit to the Developed World” said “Kyoto is a joint mechanism of the states”. Professor Rajni spoke pragmatically on Carbon Tax policy and its marketing. Making a specific point, she said that blame cannot be put only on to the developed States or industrial States because through carbon taxing policy, a State who produces less carbon can transfer its carbon credit to a more producing state. She concluded by suggesting that to create a balance, heavy carbon taxing should be imposed on the importer.

At the end of the Session, during the question hour, two important questions were asked by other delegates. The question and the answer are as follows:

1. **Question** (*Mr. Stanzin Chostak, JNU, New Delhi to Dr. Gloria Erimma Orie*): What particular sectors or opportunities are available in your country to invest in CDMs and favourable factors suitable for host countries for CDMs projects to come into implementation? Also highlight on the regional emission trading system in your country.

Answer (*Dr. Gloria Erimma Orie*): There are lot of opportunities for CDMs projects in Nigeria. However, there is no driving force to harness them. Besides, the lack of political will and the challenge of corruption and embezzlement are the biggest hindrances. She also said that there are about 750 CDMs projects funded by the World Bank in Nigeria, however there is no legislation and political will to harness them. Lack of infrastructure, lack of education, lack of business environment and high transaction cost are the factors deterrent to woo investors in Nigeria. Answering to the second question she said, that there is no regional emission trading system in Nigeria.

2. **Question** (*Mr. Vijay Prasad Jayshwal, Kathmandu School of Law to Mr. Ajay Arora*): India is going to be a super power by 2050, is there any process of EIA or Initial Impact Assessment to give licence to those industries who would become vital players to pollute environment? Secondly, does India has any regional policy to lead at regional level or to lead other countries to encounter or to solve the problem of environmental pollution?

Answer (*Ajay Arora*): We do have EIA but, we need to strengthen it and the law enforcement agencies need to follow it rigorously. Mr. Arora said that India should develop clean technology indigenously and not purchase from developed countries. He remarked that US is categorically preaching against the principle of equity by pressuring India to pay more heed to mother nature by adhering to clean technology. According to him the US is pressuring India to open more clean technology market for her which is against the principle of equity. He suggested that indigenous development of clean technology is the solution.



Working Session - IV
Saturday, April 26, 2014
12:00 p.m. – 01:30 p.m.
Venue: Seminar Hall, CLC

UNFCCC and International Environmental Principles

Chairperson: Professor (Dr.) Usha Tandon, *Professor-in-Charge, CLC*

Rapporteur: Ms. Cheshta Dahiya, *Assistant Professor, CLC*

The Session started in the afternoon of April 26, 2014 with the introduction of the Chairperson Professor (Dr.) Usha Tandon , Professor-in-Charge, CLC, by the Rapporteur, Ms. Cheshta Dahiya , Assistant Professor, CLC. The Session began with the keynote address by the Chairperson. The Chairperson stated that though it is not possible for her to attend every full Session, yet she is having an eye over every move in each Session. Further, she complimented that she is very pleased with the level of discussion happening in every Session. She also complimented and applauded, in particular the first time presenters in such kind of Conference. As an organiser, she took pride on the fact that two of the delegates have been provided by CLC this platform to present their very first paper.

The first presenter Mr. Benoit Mayer ,PhD candidate, National University of Singapore, Faculty of law while presenting his paper entitled “Conceiving the Rationale for International Climate Law “ commented that CBD principle is extremely vague. This principle fails to explain why states have to co-operate with each other. According to him, his purpose in this paper was to find out whether we can find any guidance in climate change governance from any ethical principle. Secondly, what should be the basis for differentiated responsibility? Either it should be based on capacity of states or their historical emission. As far as the stand of developing nations are concerned, way back in 1989 in carcass (prior to UNFCCC) they held that due to their higher emission rate developed nations should bear more responsibility. According to the presenter the trend is that states are governed by their interest not by ethics. And if there is any one principle (ethical) that can be relied upon is International Solidarity Principle. This principle is followed by most of the developed nations including U.S.A. of course; no harm principle was always there from the beginning. At the end the presenter said that ignorance of plights of one country can contribute towards environmental problem. He cited the example of Afghanistan for that sake.

The second paper entitled “the No-Responsibility for Climate Change under Common but



Differentiated Responsibility” was presented by Dr. Shabnam , Assistant Professor, Law Centre-II, University of Delhi, India. According to her the world today stands in a fragile environmental situation. More importantly the mandates of sovereign states have now become instrument of choice in climate change policy across many jurisdictions. Way back in 1898, warning has been given by the scientist that CO2 emission could lead to global warming. She further commented that in order to know why CBDR principle is not favourable to international community, we must appreciate the fact that each nation has its own priorities, standards, objectives and more importantly different legislations. She submitted that because of CBDR even developing nations are in race towards carbon emission. Recently in a report it was claimed that China has contributed more than America in carbon emission.

The third presenter Ms. Arunima Sarkar, BBA LL.B Student, University School of Law and Legal Studies, GGSIP University, New Delhi, India presented her paper entitled “Climate Change and Human Migration: A Quest For Co-operation Glo-cally”. Her paper was focused on human migration due to climate change. According to her, movement in response to environment and climate change is a normal adaptation strategy which is taken by environmental migrants to escape from sufferings in life. She further highlighted the various problems that are faced by migrants in their new place, be it related to employment, education, health, and asylum. In her concluding remarks, she cited that international community needs to acknowledge and formulate the dilemma of forced climate migrants. Precautionary measures should be taken up where climate disaster is predicted to occur. International recognition of refugees needs to be addressed immediately. Lastly, developmental and adaptation policies need to be focused on reducing vulnerability to environmental migrants.

The last presenter Mr. Akash Anand, Research Scholar, Faculty of Law, University of Delhi, India while presenting his paper entitled “UNFCCC and Precautionary Principle” submitted that Rio Conference could be termed as watershed in international environmental regime. His paper focused on the role of precautionary principle in contribution or removal of environmental problem in international sphere. Though domestically this principle has been accepted by almost every legal system but international court of justice has not accorded this principle yet. One of the criteria for such failure might be the factor of cost effectiveness (greater at benefit lower at cost). But, it is also a reality that precautionary principle has undergone various shifts in meaning. The presenter drew the attention towards recent trend originated almost a decade back. The concept of SRM (Solar Radiation Management) and CDR (Carbon Dioxide Removal) has now undermined the concept of precautionary principle. The concept of SRM and CDR are



important aspects of geo-engineering (changing the constituents of the geologically present things). Almost every developing country including India is now using that technique. What SRM does is that it increases the reflective index of the earth. Since the reflection increased, less heat got trapped in the atmosphere and therefore, less probability of climate change.

At the end of the Session, during the question hour, a few important questions were asked by other delegates. The question and the answer are as follows:

1. **Question** (*Mr. Wahyu Yun Santos, Faculty of law, Indonesia to Benoit Mayer & Mr. Akash Anand*): what do you think about the most feasible solution for climate change? Secondly, how precautionary principle can help in reducing climate change?

Answer (*Benoit Mayer*): I have no idea as far as the perfect solution is concerned. But I don't agree that nothing has been done in this area. Tremendous work has been done in international regime to tackle this problem and so many things yet to be done. So, surely we are heading towards a right direction.

Answer (*Mr. Akash Anand*): It is true that precautionary principle does provide some alternative when it comes to environmental problems. As far as catastrophic events are concerned precautionary principle provide immediate solution but events which are not so serious precautionary principle provide guidance through long delayed process.

2. **Question** (*Mr. Harshan Tee Pee to Benoit Mayer*): Can you describe why you have chosen social constructivist theory or international relation theory in your paper?

Answer (*Benoit Mayer*): Well, in order to communicate an argument and to make it effective, you must rely on a theory. Since my paper revolved around solidarity principle, therefore, I focused on how solidarity can be best communicated. The answer lies in international relation theory.

3. **Question** (*Younes Charbgoo, Research scholar, Faculty of law, Jamia Milia Islamia, New Delhi, India to Benoit Mayer*): In your paper, you have mentioned that Climate Justice is a mere slogan not a concept. Please comment on it.

Answer (*Benoit Mayer*): Yes, it is true that the term 'climate justice' is used for more than one thing. For some nations, it means responsibility and for others, it represents solidarity principle. Therefore, it will depend upon how you conceive the situation. The sole reason for this is that ethics never give clear direction on justice. What seems to be justice to one may be injustice to another.



4. **Question** (*Mr.Uchenna Okoronkwo, Research Scholar, Faculty of Law, University of Delhi, India to Ms. Arunima Sarkar*): Can you tell us about an Indian policy that can address impact of climate change on human migration?.

Answer (*Arunima Sarkar*): There is no such policy as yet introduced in Indian context by the Government. Nonetheless, our Apex Court in various cases has introduced guidelines known as Human Right Guidelines. There is a lot of research going on in this area and may be a there will be law in this respect in the near future.

5. **Question** (*Mr. Riccardo Pavoni, Professor of International & European Law, University of Siena, Italy to Mr. Akash Anand*): Could you please track the Supreme Court of India's approach towards the implementation of Precautionary Principle.

Answer (*Mr. Akash Anand*): In Vellore Citizen case the Apex Court held that precautionary principle is a customary principle of international law .Since India is a signatory to various conventions related to environment safety; this forms an integral part of Indian legal system.

Observation made by Professor (Dr) Usha Tandon: From 1990 onwards Indian Supreme Court has been pro-active in environmental cases to safeguard the environment. As far as the application of Precautionary Principle is concerned, I can refer two important cases. One is known as Tamil Nadu Tanneries case(1996 SC) and another is Prof. M.V. Naidu Case (1999 SC). In the first case, the issue of untreated effluents by the tanneries (around 900 tanneries) and other industries, in the State of Tamil Nadu, resulting in massive environmental degradation was brought to Supreme Court, under the Public Interest Litigation. Around 300 wells out of 400 wells used for drinking and irrigation purposes had been polluted. In this case, the Supreme Court of India, speaking through Justice Kuldeep Singh (known as Green Judge), opined on the Precautionary Principle in the context of Sustainable Development and said that this principle is a part of our municipal law. The Court did not have the occasion to apply this principle to the facts of the case, as the damage had already occurred, and the Court was more concerned to apply Polluter Pays Principal and computation of compensation. However, the other case of Prof Naidu is a typical case, involving highly technical matter, in which the Court by applying the Precautionary Principle did not allow the hazardous industry to establish a factory to manufacture castor oil derivatives and other products as they would discharge highly toxic effluents. It should be noted that the Courts are applying this principle only when there are threats of irreparable loss. In such cases, even though there is no specific scientific proof of linking that activity to the environmental damage, the Court applies the Precautionary Principle and debar the hazardous industrial activity.



Observation made by *Riccardo Pavoni on Benoit's presentation*. Firstly, I would like to say that combining international law with international relations theory is not an easy task by any means. Sometimes they get along very well, sometimes they don't. Therefore, I would like to advise that more emphasis should be laid on 'common concern of humanity' principle. This principle will link the problem of climate change with state responsibility.

Secondly, I would like to submit that problem of climate refugee has not been defined in perfection by the United Nations. In addition to it what about internally displaced person. There may be larger section of peoples who may be affected in their parent country. We must address this section as well.

Observation made by *Dr. Shabnam*: In order to ensure climate justice, we must adhere to domestic implementation calling for tortuous liability within the state. Parenting and teaching will further help in this cause.



Working Session - V

Saturday, April 26, 2014

02:30 p.m. – 04:00 p.m.

Venue: Seminar Hall, CLC

The Climate Change and the International Trade Law & Impact of Climate Change: Key Concerns

Chairperson: Professor (Dr.) P.S. Lathwal, *Professor, CLC*

Rapporteur: Ms. Harleen Kaur, *Assistant Professor, CLC*

The fifth Working Session commenced with the introduction of the Chairperson Professor (Dr.) P.S. Lathwal, Professor, CLC by the Rapporteur, Ms. Harleen Kaur, Assistant Professor, CLC. The Chairperson expressed that for academicians, students and delegates present in the Conference, there is a dire need to take into account the activities of the human beings at least which are greatly responsible for global warming and climate change.

The first presenter, Mr. Anil K. Dixit, Assistant Professor, Uttaranchal University, Dehradun, presented a paper entitled “The Climate Change and International Trade: Legal Perspective”. He cited the IPCC Fifth Assessment Report which forecast the displacement of 100s of millions of people due to lack of land and reduction of median yields by up to 2% per decade against a backdrop of rising demand of food grains by 14% per decade until 2015. He emphasized that the rising share of developing-country emissions resulting from fossil fuel combustion trade is an effective tool for achieving trade but on the other hand, there is a rise in the share of developing country emissions resulting from the fossil fuel combustion. In the end, the presenter concluded that we must identify the cost-effective policies and mitigation technologies that contribute to long-term low-carbon growth paths and the coal-driven states like India need to promote renewable energy such as solar and wind power generation.

The second presenter, Ms. Soumya Sushila Sahoo, Research Scholar, Centre for Security Studies, School of International Studies, Central University of Gujarat, Gandhi nagar, made her presentation on the paper entitled “Climate Financing: A Discussion of the Major Issues between North-South Regions- Developed countries must financially assist the developing countries”. Soumya asserted that for climate change mitigation and for making the nations adapt to the adverse effects of climate change, adequate financial resources are essential. Climate Finance is must for the climate change mitigation, adaptation projects and programs.



The presenter stressed upon the numerous issues and debates between developed and developing countries relating to climate financing. She brought to light the relevant principle of “common but differentiated responsibility” incorporated in United Nations Framework Convention on Climate Change (UNFCCC) which provides that developed countries are to assist the developing countries with the financial resources. She apprised major issues and challenges which are faced by the donor and recipient countries or North-South countries in allocating the resources justifiably and transparently. She stated that the Northern countries' agenda remains on the mitigation policies and practices for the reduction of the greenhouse gas emissions in the atmosphere, adaptation activities have been mainly the concern of the Southern economies in order to reduce the vulnerability of climate change. The presenter concluded by providing that appropriate international climate change policies are required to be designed in order to reduce climate change mitigation costs and to promote technological innovations.

The third presenter, Roshni Duhan, Research Scholar, Department of Law, B.P.S.M. University, Khanpur-Kalan, Sonapat while presenting her paper entitled “Depletion of Ozone Layer and Global Warming: A Study of Impacts of Climate Change” discoursed various effects of global warming, placing special emphasis on depletion of ozone layer. She discussed ozone depleting substances like chlorofluorocarbons (CFCs), hydrochloro-fluoro carbons (HCFCs), carbon tetrachloride and methyl chloroform. Her study claimed that ozone layer is destroyed when chlorine gas reacts with it and it is estimated that one atom of Chlorine may destroy over 5000 molecules of ozone per month. She then revealed the impact of climate change on human beings, animals, trees, ocean temperature, glaciers, weather, ecosystem, ocean acidification and forests. In the end, presenter gave certain suggestions to deal with climate change. Firstly, to stop making CO₂, by switching from oil, coal and gas to renewable energy sources like solar power. Secondly, to plant more trees and the last suggestion was to follow the three “R's”: reduce, reuse, and recycle more products.

Mr. Arpit Sharma, B.A. LL.B Student, Institute of Law, Nirma University, India, the last presenter of this Session, made a presentation on “A South African Perspective in the Climate Change Debate”. He stated that South Africa is experiencing climate change challenges impacting the lives of its people. There is considerable increase in the temperature in last 6 decades and studies reveal that a rise in temperature of 3-4°C is expected in interior regions by 2050. While highlighting the vulnerability of South Africa to climate change, the presenter also revealed some reasons. Firstly, a large segment of the



population live in impoverished circumstances, where informal settlements are set up in locations that are susceptible to extreme weather events and lack of adequate housing structures to offer sufficient protection against rain, wind and cold. Additionally, there is a high incidence of disease, which places poor people at further risk. The presenter apprised to the audience, the impact of climate change on different aspects especially water supplies, health and food security. He also explained how the Department of Environmental affairs is responding to climate change problem and the different ways and means devised by it.

THE QUESTIONS AND ANSWERS OF THE SESSION ARE AS FOLLOWS :

1. **Question** (*Vijay Prasad Jayshwal, Kathmandu School of Law, Purbanchal University, Nepal to Anil Kumar Dixit*): As international trade law strictly provides that in the green areas, there shall not be any foreign direct investment, so does Indian Government has any specific legal mechanism which stop the foreign investors from investing in those green areas? Does Indian Government have a foreign direct investment and technology transfer Act which asks for the compensation for the investors in case they are not complying their measures and activities in accordance with the Act?

Answer (*Anil Kumar Dixit*): Yes, in India, not only the legislator, but the Supreme Court also has given the judgment for the green belts. Green belts are not only been preserved by the legislators but by courts as well. As far as the transfer of clean energies is concerned, the issue has been involved with the political angles and the Government is concerned about this issue of FDI. I, from my research also, support this because the foreign investment technology will be transferred only if we promote FDI, if we don't promote, then the products will be available, but those people who are producing will not transfer the technology which is the actual need of the day.

2. **Question** (*Hyginus Uchenna Okoronkwo, Research Scholar, Faculty of Law, University of Delhi, India to Soumya Sushila Sahoo*): In your presentation, you favoured the fair payment negative externalities. Since you do not favour donor recipient window as far the assistance that comes from North to the South is concerned, can we know the channel through which you think this fair payment can be done. To take instance of China, as we discussed in the other Session that assistance is there but there are instances of misuse of assistance in financial means. How do you find that such fair payment, as suggested by you, will not be misused?

Answer (*Soumya Sushila Sahoo*): The question is related to the unfair practices



between the donor and recipient nations . Firstly, we don't have any proper way to define international climate financing and this is the reason for misuse of the finance related to climate change. Secondly, at present, the developed countries are not willing to provide the financial assistance to the developing nations, because they consider such assistance to be unfavourable to them if they provide assistance to the rising economies like India and China. So, for proper finance flows from the north to south countries, we must first precisely define what is climate finance and the inequity in the north and south countries should be addressed. The adaptation and mitigation policies should be made in assistance with the development policies like with the development assessment policies, we should go parallel for these two.

Comment by *Dr. Gloria Erinma Orie, Practicing Advocate, Nigeria*, on Soumya Sushila Sahoo's presentation: For developing countries, the suggestion is that nationally, countries must have Carbon Fund. Moreover, the United Nation's opinion on this is that the countries must create a carbon fund.

Suggestion by *T. Selvaraj, Assistant Professor, Tamil Nadu Veterinary and Animal Science University, Tamil Nadu, India*: Universally, there is no mechanism to quantify the emissions of Green House Gases and we come out with certain data with some theoretical or arbitrary models , so we need to spend on Research and Development, then only it is possible to go for further mitigation plans. So, all the countries could work cooperatively and practically to study the mechanism to know the exact amount of gases in atmosphere in a particular year.



Working Session - VI

Saturday, April 26, 2014

04:15 p.m. - 05:45 p.m.

Venue: Seminar Hall, CLC

The Climate Change and Human Rights Law

Chairperson: Professor (Dr.) Afzal wani, *Professor & Dean, School of Law and Legal Studies, GGSIP*

University, New Delhi

Rapporteur: Mr. Neeraj Kumar, *Assistant Professor, CLC*

The sixth Working Session of the Conference was the last Session of the second day of the three days International Conference and it started with the introduction of the Chairperson Professor (Dr.) Afzal wani, Professor & Dean, School of Law and Legal Studies, GGSIP University, New Delhi by the Rapporteur, Mr. Neeraj Kumar, Assistant Professor, CLC.

The Chairperson in his keynote address expressed that human being is under threat by climate change. The change in itself is not anything that should not be there but change should always be there for something better. However, this climate change has adverse impact on human beings himself. So when it is adverse to human being than definitely, we have to see that this change should be avoided. This change should change for the better and nobody is going to come from the heaven to change it. It is the human being himself who has to change the things and that is why I would say again that if it is human rights than human being has to protect his own human rights. For the right to live, he should protect it himself because he himself is violating the human rights.

The first paper presenter Ricardo Pavoni, Professor of International and European Law, University of Siena, Italy, presenting his paper entitled "Climate Change and Human Rights: A Viable and Unavoidable Relationship" discussed the relationship between the effects of climate change and enjoyment of human rights and how international human rights institutions and regimes should be mobilised in order to provide redress to individual human rights by climate change induced harm. The increasing acceptance at the international level of a self standing human right to a healthy environment was highlighted by the presenter, for its potential to function as a critical yardstick guiding the review of the legality of climate change related activities undertaken by states and international organisation. The presenter concluded that the human rights law are viable and unavoidable framework for addressing the contemporary challenge arising from the climate change.



The second presenter Mr. Architesh Panda, Scientist, Indian Rice Research Institute, New Delhi, India co-author with Ritumbra Manuvie, School of Social and Political Sciences, University of Edinburgh, U.K. presenting his paper entitled “Governance of Climate Change induced Migrations in India” analysed how the multi-level governance institutions and cross-sectoral frameworks for the protection of environment and human rights can potentially interact together to respond towards climate change adaptation and migration in India. Currently, structural violence, and the violence of inequality and poverty are not considered as violations against human rights in positivist international law. The presenter suggested that we need to rethink migration as a human activity, rather than the current sedentary approach which by default treats migration as if it were a problem. The ability to escape life threatening situations and to seek opportunities to improve one's life is a precursor to a dignified existence. He lamented that while human rights law remains silent on the lack of universal mobility rights, states use their own terms and conditions to regulate the admission of foreigners into their territories.

The third presenter Mr. Vijay Prasad Jayshwal, Kathmandu School of Law, Purbanchal University, Nepal presented a paper entitled “State Responsibility for Global Climate Change: A Case Study of Nepal with Special Focus on Displacements of Indigenous Groups”. He attempted to impute global climate and its unavoidable impact to States on behalf of Nepal, thereby giving the Nepalese who are unnecessarily being victimized by the crash of Global Climate Change to ask the opportunity to be compensated for the loss of their homeland in the sense that the rapid IDPs (Internally Displaced Persons) occurred after unimaginable internal ten years civil conflict on one side, while the Global Climate change is another valid factor for the displacement of Indigenous people. He said that there are number of nations which are producing high percentage of carbon dioxide and other chemicals which are hazardous for the environment. He apprised that Nepal has a large amount of indigenous communities and their standards of living is far below than the other citizens. Nepal must take initiation to compensate them due to the climate change and its affects. But he also accepted that it is, obviously, hard for Nepal to bring suit against the other nation asking for damages.

Mr. Hyginus Uchenna Okoronkwo, Research Scholar, Faculty of Law, University of Delhi, India, the fourth presenter of the Session, presented a paper entitled “The Role of Nigerian Judiciary in Mitigating Climate Change and Post-2015 Lessons for Other Developing Countries” and discussed the factors responsible for the climate change and atmospheric warming. He disclosed that gas flaring is the major source of climate changes in Nigeria and Nigeria is reportedly second world's biggest gas flarer. He also suggested that developing



countries in post 2015 extending the MDG, need robust judiciary to ensure environmental laws and act according to environmental policy and that other developing countries should learn from inadequacies of Nigeria. He also discussed about the implementation of laws in Nigeria in controlling the Gas flaring by the Western companies like Shell etc.

At the end of the Session, during the question hour, one important question was asked. The question and the answer are as follows:

1. **Question** (*Mr. Stanzin Chostak, Research Scholar, JMI, New Delhi to Ricardo Pavoni*): Can we locate or pinpoint from the rights perspective, in the third generation of human rights, the impact of climate change on human being? Can the Polluter Pays Principle, fix responsibility to a particular emitting country under the legal regime or framework?

Answer (*Ricardo Pavoni*): Yes, we should look for the third generation of human rights and specially in relation to environmental rights. There is a global movement towards improving and enhancing the effectiveness of the environmental rights and also third generation of environmental rights both - the substantial and procedural. Public participation and public information are crucial in this context. The polluter pays principle is a rule which could help in adjudging the cases involving in the climate change but there appears to be no connection of it with human rights law.



Working Session - VII

Sunday, April 27, 2014

09:30 a.m. - 11:15 a.m.

Venue: Seminar Hall, CLC

Comparative / Domestic Climate Change Law and Policy & The Climate Change and Human Rights Law

Chairperson: Professor Rajiv Khanna, *Former Professor, CLC*

Rapporteur: Ms. Anju Sinha, *Assistant Professor, CLC*

The seventh Working Session of the Conference was the first Session of the third day of the three days International Conference and it started with the introduction of the Chairperson Professor Rajiv Khanna, Former Professor, CLC by the Rapporteur, Ms. Anju Sinha, Assistant Professor, CLC. The first presentation was made by Dr Liuyong, Associate Professor, Law School, Zhejiang University of Finance and Economics, China. His Paper was entitled “Current Achievements and Future Challenges: An Appraisal of China's Newly Launched Regional Carbon Emission Trading System”. He apprised the audience that China has showed its strong desire and aggressiveness to mitigate climate change and GHG emission in that by the end of 2013, five regions in China (i.e. Shenzhen, Shanghai, Beijing, Guangdong and Tianjin sequentially) officially initiated regional ETS. He discussed the achievements of newly launched ETS in China and also the challenges to be faced in future which included accuracy and reliability of data, practicability of compliance etc.

The second presentation was made by Dian Agung Wicaksono and Wahyu Yun Santosa, from Faculty of Law, Universitas Gadjah Mada, Bulaksumur, Sleman, D.I. Yogyakarta, Indonesia, on a paper entitled “the Local Government Policy to Perform Environmental Performance in REDD+ Program in the Context of Unitary State of Indonesia.” They highlighted the efforts of the Government to reduce emission to mitigate climate change and a new and more affective approach, i.e., REDD+, because it provides financial incentives for forest carbon storage. They emphasized that this approach is evidently different from the conventional forest conservation efforts, however, the practical implementation of REDD+ has proven to be cumbersome. They analysed the implementation of REDD+ and its correlation on performing environmental performance by the local Government.

The third presentation was made by Dr. Vandana Mahalwar, Assistant Professor, CLC on a paper entitled “Food Insecurity in the Face of Climate change”. She analysed that agriculture is



impacted by climate change, by way of droughts, heat stress, desertification, changes in rainfall pattern and flooding, the widespread food insecurity is not only due to the non-availability of food in the market but also due to the inadequate purchasing power among the poor. She stressed that food production is affected most directly by critical climate elements like temperature, radiation, precipitation, etc. and affects food production directly through changes in agro-ecological conditions.

The fourth and the last presentation was made by Ms. Gurminder Kaur, Assistant Professor, Army Institute of Law, Mohali on a paper entitled “protection of Human Rights Qua Climate Change”. She made an analysis of the existing laws in India and asked for the requisite changes in them to have more green laws to save the earth. Climate change is an inescapable environmental problem which is not confined to local, regional or national level but it has become a global problem.

Professor Khanna concluded the Session by saying that it was an enlightening Session to begin with Chinese ETS programme as highlighted by Dr. Liuyong and an interacting Session of Indonesian experience of REDD + and the constitutional problems as being faced by Indonesia because of Unitary Government and the problem faced as regard to the local problems. The Chairperson said that Vandana highlighted food security and insecurity and issues related to human rights and climate change was highlighted by Gurminder Kaur proposing green criminology.

Then the floor was open for questions, comments, suggestions, etc.

1. **Question** (*Aunay Sahai, 1st year, LL.B., CLC to Dr. Dinesh, Scientist CSWCRTI Research Centre, Tamilnadu*): We are talking about environment protection and we are sitting in an AC room which is emitting a lot of carbon. How this problem can be solved?

Answer (*Dr. Dinesh, Scientist*): AC is not emitting pure carbon, it is emitting CFC which is less harmful. HFC technology has developed and now carbon does not have capacity to damage ozone. Recent versions of Refrigerators and AC have HFC technology.

2. **Question** (*Dr. Saru Arifin, Faculty of Law, Semarang State University, Kampus Sekaran, Gedung K, Gunungpati Semarang, Central Java, Indonesia to Dr. Vandana Mahalwar*): As far as food security is concerned what technological advancements and policy measures are taken by the State and what kind of specific policy is required to tackle the situation when people become victim of climate change, e.g. flood landscape and other calamities?

Answer (*Dr. Vandana Mahalwar*): We are having our own Food Security Act which has provisions that food grains will be given to a particular category of persons at very less cost



but at the same time there is one provision which says that these provisions will not be applicable in case of disaster.

3. **Question** (*Dr. Saru Arifin to Ms. Gurminder Kaur*): How is policy framework going to be effective in order to protect people's human rights?

Answer (*Ms. Gurminder Kaur*), Unfortunately human rights are being violated on account of climate change. Had the case been so easy the discussion would have been regional and not global. Since, time immemorial, the life on earth was completely wiped out and that happened probably because of the environmental change at that time and we really that should it not be repeated to human race and for that, we need mechanism and for that the requisite policy is one of the answers.

4. **Question** (*Mr. Vijay Prasad Jayshwal, Kathmandu School of Law, Purwanchal University, Nepal to Dr. Vandana Mahalwar*): Does Indian Constitution guarantees food security right for people? How would you say in Asia where there is huge food deficit in fact to talk about food security?

Answer (*Dr. Vandana Mahalwar*): Recently we have passed our Food Security Act which provides the circumstances when food grain can be given on nominal price but in case of flood or any other disaster the Government may not be able to do so. All factors are responsible for direct or indirect implications, rise in temperature and change in rainfall effecting food production.

5. **Question** (*Benoît Mayer, Ph.D Scholar, University of Singapore, Singapore to Dr. Vandana Mahalwar*): Food security regarding climate change is very interesting. There is no reason to believe that warmer land will have less food, probably new technology can try to do something but population of India is increasing rapidly, so do you think in a long term India will have to borrow large quantity of food?

Answer (*Dr. Vandana Mahalwar*): Our food production is not on that lower side but it is not great either, it is average. Farmers know when is the right season, if in one season they are not able to produce according to their expectation, next season they will rectify their procedure

Comment (*Dr. Dinesh, Scientist*): He informed the house that Tamil Nadu University has developed crop that has capability to adopt, mitigate or overcome climate change and able to produce excellent yield with very minimum amount of water.



Working Session - VIII

Sunday, April 27, 2014

11:30 a.m - 01:15 p.m

Venue: Seminar Hall, CLC

Comparative / Domestic Climate Change Law and Policy

Chairperson: Professor (Dr.) J.L. Kaul, *Professor CLC; Currently Vice-Chancellor,
Vikram University, Ujjain*

Rapporteur: Mr. Ajeet Singh, *Assistant Professor, CLC*

The eighth Session started on the 3rd day in the morning of April 27, 2014 with the introduction of the Chairperson Professor (Dr.) J.L. Kaul, Professor CLC; Currently Vice-Chancellor, Vikram University, Ujjain by the Rapporteur, Mr. Ajeet Singh, Assistant Professor, CLC. The Session began with the keynote address by the Chairperson highlighting the interface between environmental negotiations and international law. He also cited the shortcomings in the international environmental law model. Finally, he stressed on public-private partnerships and active public participation in environmental engagements both at domestic and international level as a means to overcome the difficulties in this area.

The first paper presenter Dr. Inderjeet Singh Sodhi, Head, Department of Public Administration St. Wilfred's Post Graduate College, Jaipur, India, presenting his paper entitled "Climate Change Initiatives and Strategies in India—Need for Comprehensive Policy and Governance" broadly discussed various policies governing environment law in India. Highlighting and asserting problem of climate change in the country, he cited the journey of national environmental policies which began from Fourth Five Year plan to the latest National Action Plan on Climate Change, 2008. He highlighted that the Plan identifies eight Core "National Mission" running through 2017. According to the speaker, though there are number of policies for guidance but they are not co-ordinated by the same objective. The main problem the speaker found with the policies was that they laid down broad guidelines for planners and administrators but their execution is left to the administrators who are prone to errors. He also applauded the establishment of "National Environment Assessment & Monitoring Authority" under EPA, 1986 Act.

The second presenter Ms. Mukta Verma, Assistant Professor, Department of Law, University of Allahbad, Uttar Pardesh, India, presenting her paper entitled "Mitigating Climate Change: Role of Constitution, Judiciary and Executive in Present scenario" said that if judicial and



constitutional provisions have to reach their zenith , there is a need of public participation. The speaker cited the relevant provisions of Indian Constitution like Article 14, 19, 21, 48A, 51A(g), 246, 248, 253 in combating environmental problem in India.. She further stressed that how Indian judiciary had adopted an innovative approach in environmental matter in India. The Precautionary Principle, Polluter Pays Principle, Public Trust Doctrine have been applied by Indian Courts to protect and promote the clean environment in the country.

The paper entitled “Climate Change and Sustainable Development – An Insight into India's Approach” was presented by Upasana Koul, Research Scholar, Academy of International Studies, Jamia Milia Islamia University, New Delhi, India. She expressed that the conventional paradigm of economic development, which was woven around the optimal resource allocation, is now extended to include participative processes, local initiatives and global interfaces. She further submitted that in its course of action for sustainability India has made an effort in integrating green technologies and providing solutions for power supply, transportation, water treatment etc for sustainable urban development. She was of the opinion that sustainable development could be achieved only if legal measures are made stricter. Further the role of civil society and NGOs should be enhanced for creating awareness of sustainable development in both rural as well as urban areas.

Last but not the least, Mr. Q Man Ban, Research Scholar, Hanyang University, Seoul, South Korea the 4th presenter of the Session presented a paper entitled “Judicial Activism and Climate Change in South Korea”. In his presentation he highlighted a very famous Resort Gymnasium Case decided by the Korean Court. The centre of attraction in his paper was the concept of neo-liberalism. The presenter tries to find out whether historically this concept has contributed towards environment deterioration. Towards the end of his paper he poses a question that whether the modern world is heading towards post neo-liberalism. He concluded by suggesting that to create a balance, there is a need for a middle path.

At the end of the Session, during the question hour, few important questions were asked by other delegates. The question and the answer are as follows:

1. **Question** (*Mr. Vijay prasad Jayshwal, Kathmandu School of Law, Nepal to Dr. Inderjeet S. Shodi*): How far policy & law are effective in mitigating climate change in India?

Answer (*Dr. Inderjeet S. Sodhi*): There are number of laws and policies in India with respect to climate change like National Environment Policy 2006, Auto Fuel Policy 2002, National Green Tribunal 2010, and recently announced National Action Plan on Climate Change 2008. All these legal measures are outcome of the sincere efforts of the Indian



Government. But since some of them introduced are recently, there is no such study how they will be able to walk off with the problem. So, therefore, we have to wait and watch.

2. **Question** (*Mr. Dian Agung Wicaksono, Faculty of Law, Indonesia to Ms. Mukta Verma*): What is the role of Indian judiciary and executive in implementing Constitutional provisions for the safeguard of environment?

Answer (*Ms. Mukta Verma*): As the focus of my paper is mainly on constitutional provision relating with the environment. The role of judiciary is commendable, the executive many a times lack the will to enforce law.

3. **Question** (*Wahyu Yun Santosa, Environmental Law Department, Faculty of Law, Universitas Gadjah Mada, Bulaksumur, Sleman, D.I. Yogyakarta, Indonesia to Mr. Q Man Ban*,): Is there any concept of judicial activism in South Korea?

Answer (*Mr. Q Man Ban*): First of all, I would like to clear that the concept of judicial activism is not the initiative of Korean Government. This is the court's opinion. Secondly, I would like to say that there must be distinction between public and private areas where this thing has to be implemented.

Suggestions by Prof. J.L. Kaul

1. We must understand the discord between Economic Development and Environment.
2. In international negotiations developing nations must act as partners rather than mere participators.
3. Developed nations must adopt freedom of approach rather than vested interest approach.
4. We must follow economically viable alternative instead of equalitarian approach.
5. We must bring in incentive approach into the legal system.



Working Session - IX

Sunday, April 27, 2014

2:15 p.m.- 4:00 p.m.

Venue: Seminar Hall, CLC

Comparative / Domestic Climate Change Law and Policy

Chairperson: Professor (Dr.) Riccardo Pavoni, *Professor of International and European Law,*

University of Siena, Italy

Rapporteur: Dr. Vandana Mahalwar, *Assistant Professor, CLC*

The Ninth and the last Session started post-noon on April 27, 2014 with the introductory remarks about the Chairperson, Professor (Dr.) Riccardo Pavoni, Professor of International and European Law, University of Siena, Italy by the Rapporteur: Dr. Vandana Mahalwar, Assistant Professor, CLC. The Chairperson in his keynote address opined that the Session would provide about the key role played by courts of different nations for the mitigation of climate change as well as the steps taken by the executive and legislature stand in mitigating the climate change.

Mr. Saru Arifin, the first presenter from Faculty of Law, Semarang State University, Indonesia, presented his paper entitled "Indonesian Climate Law and Institutional Arrangement". Mr. Saru emphasized that Indonesia, being territorially prone to floods, tornado, landslide, tsunami, and also tectonic earthquakes, lacks the regulations related to the prevention and treatment of natural disaster. He told that the only law in Indonesia relating to disaster is the Law Number 24 (2007). The speaker stated three prominent reasons behind said enactment : first, Constitution of the Republic of Indonesia makes the Republic of Indonesia responsible for protecting its people with an objective to protect the life and livelihood as well as the protection of the disaster; secondly, as an island country, 80% Indonesia is prone to natural disasters and the resultant human casualty loss on every natural disaster are not appropriately handled ; thirdly, the current law on disaster management is not the adequate means to tackle the problem systematically. He articulated that there are two institutional arrangements namely, the National Body for Disaster Prevention and the National Council on Climate Change, which formulate various policies and strategies to climate change control activities. In the last, the speaker opined that there must be an exclusive and specific law to achieve the effective mitigation action.



The second speaker, Mr. Younes Charbgoo, Research Scholar, Jamia Millia Islamia, New Delhi, presented his paper entitled “The Role of Social Protection Mechanisms in Climate Change Mitigation in India”. He discussed about social security as a vital tool for climate change mitigation. The presenter also included various international instruments and conventions which guarantee a minimal level of income and security for everyone and human-centric means to handle the global poverty and vulnerability stemming from climate change. While highlighting the social security programs in India, the presenter stressed that the National Rural Employment Guarantee Act (NREGA) is one of the largest social protection mechanism in India which uses the Adaptive Social Protection framework covering Protective, Preventive, Promotive and Transformative dimensions. He concluded by providing that there are some roadblocks and challenges in implementation of these social security programs which need to be handled appropriately and a comprehensive and global social protection system for climate change victims is must.

The third presenter, Rishikesh Awasthi, Advocate, Supreme Court of India, presented a paper entitled “Environment Laws : A Different Perspective and Conflicting Execution”. He discussed the Indian experience with Environmental Impact Assessment and how the EIA legislation mandates for various projects such as mining, thermal power plants, river valley, infrastructure and industries including very small electroplating or foundry units to get environment clearance. While expressing on The Forest Right Act, presenter's chief lamentation remained on the administrative failure because of certain loopholes regarding execution of law. He reasoned that at higher level, laws are not properly executed because of profit motives of the corporate while at the lower level, people are unaware. He suggested to have some orientation programs at the lower level to make people aware about their rights.

Govinda, Department of Biochemistry, MD University, the fourth presenter, while presenting his paper on “Environmental Protocols for Protection of Ozone, Biodiversity and Climate Change”, summarized the causes and consequences of the depletion of ozone layer. He incorporated various international agreements like Montreal Protocol, Kyoto Protocol, Cartagena Protocol, Bucharest Convention, Greenhouse Gas Protocol, Ramsar Convention, Madrid Protocol which are designed to protect the ozone layer. He recommended to frame certain policies and management strategies to reduce ozone levels in the light of evidence that there is a “climate penalty” as raised temperatures make it more difficult to reach targets for ozone in summertime.

The last presenter of the Conference, Mayank Vikas, Working in Raptor Conservation in Urban Landscapes presented his paper entitled “Nuclear Plant On Mountain Top: Whether



An Ecologically Sustainable Answer To India's Energy Security". He bewailed on the India's increasing investments in renewable and alternate energy resources, mainly nuclear energy. The centre of the presentation was Government of India's proposed construction of a 9,900 MW nuclear power plant in Jaitapur, Maharashtra, reported as being one of the world's largest nuclear power plants and its probable effects. He stressed that exacerbated concerns of the risks of a nuclear disaster in India is the inadequate legal and regulatory regime to govern the nuclear energy sector and effective disaster management. In the last, he recommended that in absence of appropriate comprehensive legislative mechanism, the Jaitapur Project must be deferred and the Government needs to delve into more non-nuclear renewable energy sources. In the end of the Session, some important questions were asked by some other delegates. The question and the answer are as follows:

1. **Question** (*Azma, IInd year student, CLC to Rishikesh Awasthi*): The Forest Rights Act is a protection or a tool to monopolize the forest rights of the tribals and adivasis in the name of national interest?

Answer (*Rishikesh Awasthi*): As far as Forest Right is concerned, it is clear that Forest Rights Act is not implemented properly. The Forest Rights Act is a very important Act and if it is implemented properly, then there will be high association between the forest and forest dwellers as today this association is too weak.

2. **Question** (*Harshan Tee Pee, PhD Scholar, School of Social Science, Tata Institute of Social Sciences, Deonar, Mumbai to Mayank Vikas*): Some of the recommendations of the Gadgil Committee clearly provide that if you are staying in the Ecologically Sensitive Zone 1, then you cannot have a normal agriculture practice, so what do you think about the recommendation of the Gadgil Committee report, especially, its impact on agriculture sector?

Answer (*Mayank Vikas*): As we know that the Gadgil Committee Report has been rejected by the Government and now it is the Kasturirangan Report which is anyway implemented. One must be very sensitive to the fact that western ghats are experiencing the conversion from a forest land to non-forest land including for agricultural purposes and lot of this conversion is taking place because of coffee plantation owners and people who are not necessarily small time farmers. One needs to have more advanced approach towards this landholding and some exceptions can be drawn for small holding farmers who are doing subsistence farming and I am personally not of the opinion that there must be any levy for the farmers if the western ghats have to survive for the next generation.



Suggestion by *Mr. Stanzin Chostak, Ph.D. Scholar, Jamia Millia Islamia University, New Delhi*: When we consider social welfare schemes like MGNREGA as an effective means of social security, there is also watershed development which is implemented by the Government of India at the district level through rural development department for promoting forestation.

3. **Question** (*Riccardo Pavoni, Professor of International and European Law, University of Siena, Italy*): Are you aware of the reaction of UNESCO on the Jaitapur Project?

Answer (*Mayank Vikas*): UNESCO and India have been trading barbs on it for long time because UNESCO has demarcated the entire area as protected area. It has been two years but there has not been any de-recognition by UNESCO. Protection started just because we had the Kusturirangan Report last year.



Summary of Discussions

Conclusions :-

1. The problem of landfill management is not only a challenge for the developing countries but it is a challenge all over the world. The MSW generated by people should be disposed in a proper manner i.e., land fill, or it will have serious environmental consequences.
2. There are four sources of renewable energy : Biomass Energy, Hydro Energy, Solar Energy and Wind Energy. There are policies of investment in these sectors i.e. in sector of Biomass Energy- there is MNRE Schemes and Programmes for Rural Applications; in case of Hydro Energy- the Small Hydro Power Programme; in case of Solar Energy- the Solar Thermal Energy Demonstration Programme and in sector of Wind Energy- the Demonstration Programme on Generation Based Incentives for Grid Interactive Wind Power Projects. There are various initiatives taken by Government to make investment in this sector, there are certain tariff policies to encourage investment in this sector. At the same time, there are many obstacles in the growth of this sector, as the operational equipments are located in hilly areas where industries are less so there is less requirement of energy.
3. The diversity of indigenous cultures provides unique insights and powerful codes on how to live harmoniously with the nature. By cherishing the value of traditional knowledge, we can discover how best to adapt to a changing climate.
4. Bangladesh is one of the worst hit countries by climate change and the fishermen fall easy prey to it. The rise in the surface temperature, lack of amenities with the fishermen and fishermen's lack of knowledge of the climate change, are the main reasons of the impact of climate change on fisheries.
5. There had been no emphasis on the social and gender aspects of climate change but only on the scientific ones which is not enough. The venerable society is closely related with climate change.
6. The disasters caused by Cyclone in Thane, Cuddalore, Tamil Nadu had really impacted the economic situation, but MGNREGA has been helpful to a considerable extent in overcoming the impacts of climate change.
7. In the Cold Desert of the Western Indian Himalayan Region of Ladakh, there is a need to preserve the natural resources, especially the glaciers. Because of the climate change, extreme climatic conditions take place, as during some parts of the year there are cloud



bursts whipping out life and property and during other season, the scanty rainfall make it impossible for the grass to grow, thus making it hard for the sheep to feed upon who are reared to make shawls, and they starve to death. The Changthang village in particular is worst affected.

8. We need to rethink climate migration as a human activity, rather than the current sedentary approach which by default treats migration as if it were a problem. The ability to escape life threatening situations and to seek opportunities to improve one's life is a precursor to a dignified existence. While human rights law remains silent on the lack of universal mobility rights, States use their own terms and conditions to regulate the admission of foreigners into their territories.
9. Though Human Rights Law may be well equipped to deal with the equity dimension of climate change, but the measures which were established from the year 1992 to 1997 would not be applicable in 2014, and for the current era new methods need to be devised.
10. In Nigeria, The lack of political will and the challenge of corruption and embezzlement are the biggest hindrances to invest in CDMs. Besides, Lack of infrastructure, lack of education, lack of business environment and high transaction cost are the factors deterrent to woo investors in Nigeria.
11. Climate change is not natural but anthropogenic. Environmental policies should be strengthened rather looking towards mainly on economic growth and benefit.
12. The capacity building is critical for the success of a new climate change agreement All the States should come together to solve Climate Change as it is global problem.
13. The Indian judiciary is pro-active in environmental protection and has played a major role in the enhancement of wholesome environment in India.
14. At present India is following International Refugee Law for climate migrants. The Supreme Court of India has given the guidelines but no statutory guideline has been enacted by the legislature so far.
15. The principle of Common but Differentiated Responsibilities has resulted in non responsibility and calls for caution and more emphatic approach in adoption of Kyoto-2.
16. We don't have exact definition on climate finance which is probably one of the reasons of its misuse.
17. There is no exact data on quantum of emission of climate gasses. There is only arbitrary data available on that.



18. International human rights institutions and regimes should be mobilised in order to provide redress to individual human rights by climate change induced harm. The human rights law are viable and unavoidable framework for addressing the contemporary challenge arising from the climate change.
19. We must understand the discord between Economic Development and Environment.
20. The multi-level governance institutions and cross–sectoral frameworks for the protection of environment and human rights can potentially interact together to respond towards climate change adaptation and migration in India.
21. Gas flaring by the western companies like Shell etc. is the major source of climate change in Nigeria and Nigeria is reportedly the second world's biggest gas flarer.
22. Though some progress has been made by the Nigerian Judiciary in mitigating climate change, it either lacks the necessary teeth to bite or is deprived of the courage to bite in this regard.
23. China being one of the most polluted countries, five regions have launched Carbon Emission Trading System in 2013. Though some achievements have been made, there are still various challenges that China has to face in future concerning accuracy and reliability of reporting data, compliance and enforcements linkages etc.
24. The Indonesia's new approach known as REDD+, providing financial incentives for forest carbon storage, to reduce emission to mitigate climate change appears to be quite effective. However, the practical implementation of REDD+ has proven to be cumbersome at the local level. In Indonesia the Local Government Policy to Perform Environmental Performance in REDD+ Program is posing the constitutional problems and conflicts because of Unitary Government, as a result of which problems are faced at local and national level.
25. The agriculture is impacted by climate change, by way of droughts, heat stress, desertification, changes in rainfall pattern and flooding. The widespread food insecurity is not only due to the non-availability of food in the market but also due to the inadequate purchasing power among the poor.
26. The main problem with various policies governing environmental law in India is that they lay down broad guideline for planners and administrators but their execution is left to the administrators who are prone to errors.
27. If judicial and constitutional provisions have to reach their zenith; there is a need of public participation along with co-operation of all national law and conventions.



28. A key challenge for developing countries, including India, is to make development the principal instrument for adaptation vis-à-vis the adverse impacts of climate change.
29. Social security mechanism is a vital tool to handle the global poverty and vulnerability stemming from climate change. There are some roadblocks and challenges in implementation of these social security programs which need to be handled appropriately.
30. There are administrative failures with special reference to Environmental Impact Assessment for various projects such as mining, thermal power plants, river valley, infrastructure and industries including very small electroplating or foundry units to get environment clearance. At higher level, laws are not properly executed because of profit motives of the corporate while at the lower level, people are unaware.
31. The exacerbated concerns of the risks of a nuclear disaster in India is the inadequate legal and regulatory regime to govern the nuclear energy sector and effective disaster management.

Recommendations and Suggestions :-

1. The existing sources of energy-kerosene, LPG and diesel- should be switched over to solar lights, and other renewable sources of energy which are more environmental friendly and also reduce vendor's dependence on the local light provider.
2. The traditional knowledge of many communities embodying spiritualized and ancient relationship with the earth's systems and cycles should be revived.
3. In conflict areas, army should comply with the international standards to safeguard the natural resources and the weapons that destroy the environment should be banned..
4. Since landfill management is a big challenge all over the world, an alternative solution needs to be sorted out strengthening the research and development all over the world.
5. People should adopt and follow the Ayurveda policy to live harmoniously with the nature
6. There should be legal regulation of ground water in the Cold Desert of the Western Indian Himalayan Region of Ladakh as this region has been exploited as a result of the boon of the tourism industry.
7. The developed States should be more open financially to the developing states for mitigation, adoption, technology development and transfer.
8. Human rights law is a viable and unavoidable framework for addressing the contemporary challenge arising from the climate change.



9. The developing countries in post 2015 extending the MDG need robust judiciary to ensure environmental laws.
10. Since Kyoto Protocol has resulted in an indirect benefit to the developed world, heavy carbon taxing should be imposed on the importer, to create a balance.
11. The hybrid narratives needs to be conceived for International Climate Law, which would reconcile moral aspiration with pragmatic constraints by “talking ethically to states interest”.The concept of complex interdependence is required, as the principal of common but differentiated responsibilities and respective capabilities in existing climate law provide little guidance. While blame game going on developed countries say those who are emitting should be made liable. Developing countries say those who have done it are to be made responsible.
12. Climate Refugee Law in India must be enacted as early as possible by the Parliament.
13. At least domestic implementation of Kyoto-2 be made, tortious liability on citizen
14. The climate mitigation and adaptation policies should be consistent with the developmental policies. Thus, definition on climate finance is the need of the hour.
15. All countries should work practically and in a cooperative manner as to study the emission of climate gases in a particular year. Thus, research must be undertaken for collection and assimilation of data on quantum of emission of climate gasses.
16. A comprehensive global social protection system for climate change migration is must.
17. The strict legal measures are must to achieve sustainable development.
18. If judicial and constitutional provisions have to reach their zenith, there is a an need of public participation in obeying the laws.
19. A key challenge for developing countries, including India, is to make development the principal instrument for adaptation vis-à-vis the adverse impacts of climate change. Besides, legal measures being made stricter, the role of civil society and NGOs should be enhanced for creating awareness of sustainable development in both rural as well as urban areas.
20. In international negotiations developing nations must act as partners rather than mere participators.
21. Developed nations must adopt freedom of approach rather than vested interest approach.
22. We must follow economically viable alternative instead of equalitarian approach.
23. We must bring in incentive approach into the legal system.



24. In Indonesia, besides, Law Number 24 (2007) and various constitutional provisions, there must be an exclusive and specific law to achieve the effective mitigation action of climate change.
25. Challenges in implementation of social security programs need to be handled appropriately and a comprehensive and global social protection system for climate change mitigation is must.
26. Since at higher level, laws are not properly executed because of profit motives of the corporate while at the lower level, people are unaware, therefore to solve this problem of administrative failure in execution of law, especially, under The Forest Right Act, we need to have some orientation programs at the lower level to make people aware about their rights.
27. The Forest Rights Act is a very important Act and if it is implemented properly, then there will be high association between the forest and forest dwellers as today this association is too weak.
28. In the absence of appropriate comprehensive legislative mechanism, the Jaitapur Project must be deferred and the Government needs to delve into more non-nuclear renewable energy sources.



Cultural Event

During the evening of the second day i.e., 26th April, 2014, after the Working Sessions, a cultural event was organised. The event was sponsored by Mr. Devendra Maan, Coordinator of Spic Macay and Mr. Rajender Sangwan, Advocate, Delhi High Court.

In the event, Qawwali was performed by Nizami Brothers (Junior). Nizami Brothers (Junior) is one of the most popular Qawwali singers band in India. The hall was packed with audience with no room for sitting. Many people have to stand to enjoy the show. The professors and dignitaries tabbing their fingers on their lap with the beat of the music, a shy away smile when the singers commented on them; a big currency denomination when the singers compliment were the memories of the show. Besides, the CLC students, CLC faculty members, and delegates the audience included judges and other dignitaries. The show lasted for about two hours from 06.00 pm to 08.00 pm. (Indian Standard Time).





List of Participants

Including Dignitaries

- Hon'ble Mr. Justice Arjan Kumar Sikri
Judge, Supreme Court of India
New Delhi
- Hon'ble Mr. Justice Swatanter Kumar
Former Judge, Supreme Court of India
Chairperson, National Green Tribunal
New Delhi
- Hon'ble Mr. Justice Jayant Nath
Judge, High Court of Delhi
New Delhi
- Mr. Mohan Parasaran
Solicitor General of India
New Delhi
- Hon'ble Mr. Justice T.S. Doabia
Former Judge,
Madhya Pradesh High Court
- Ms. Pinky Anand
Senior Advocate
Supreme Court of India
- Mr. Sidharth Luthra
Additional Solicitor General of India
New Delhi
- H.E. Major General Vetsop Namgyel
Ambassador Extraordinary and Plenipotentiary
Royal Bhutanese Embassy
New Delhi
- Mr. Son Kuswadi, Education Attaché
Embassy of the Republic of Indonesia
New Delhi
- Hon'ble Professor (Dr.) Dinesh Singh
Vice-Chancellor
University of Delhi, Delhi
- H. E. Mr. Lee Joon-gyu
Ambassador Extraordinary and Plenipotentiary
Embassy of the Republic of Korea
New Delhi
- Col. Je-Man Hu
Military Attaché
Embassy of the Republic of Korea
New Delhi
- H. E. Dr. Arye Kumar Jagessur
High Commissioner
Mauritius High Commission
New Delhi
- Mr. Tokunbo Falon
Minister (Trade & Investment)
High Commission of the Federal Republic of
Nigeria
New Delhi-110021
- Professor Do-Yoing Kim
Department of East Asia
University of Delhi
- Professor Anna Kim
Institute of Korean Culture
- Dr. Joo-Hee Kim,
Researcher, Department of Sociology



- Mr. Abrar Hussain Hashmi
Counsellor
High Commission for Pakistan
New Delhi
- Professor (Dr.) J.L. Kaul
Professor CLC; Currently Vice-Chancellor
Vikram University, Ujjain, India
- Professor (Dr.) Manoj Kumar Sinha
Director, Indian Law Institute
New Delhi
- Professor (Dr.) Afzal Wani
Dean, School of Law and Legal Studies,
GGSIIP University, New Delhi
- Mr. Sanjay Kumar, DHJS
Registrar General
National Green Tribunal
New Delhi
- Professor (Dr.) P.N. Singh
Former, Professor, CLC
- Professor T.D. Sethi
Former Professor, CLC
- Professor Rajiv Khanna
Former Professor, CLC
- Professor (Dr.) B.T. Kaul
Professor-in-Charge
Law Centre-II
University of Delhi
- Dr. O.B. Lal
Associate Professor, L.C.-II
- Mr. O.P. Sharma
Associate Professor, L.C-II
- Professor (Dr.) Usha Tandon
Professor-in-Charge
CLC
- Professor (Dr.) S.C. Raina
Professor, CLC
- Professor (Dr.) P.S. Lathwal
Professor, CLC
- Professor (Dr.) Kamla Sankaran
Professor, CLC
- Hon'ble Mr. Justice Abdul Rauf Ibrahim
Judge, High Court of Maldives
Maldives
- Hon'ble Mr. Justice Abdulla Hameed
Judge, High Court of Maldives
Maldives
- Mr. T. Selvaraj
Assistant Professor, Tamilnadu Veterinary and
Animal Sciences University Tamilnadu, India
- Ms. Ranidipa Ghosh
Law Clerk-Cum-Research Assistant
Calcutta High Court, West Bengal, India
- Mrs. Nellu kumari Ram
Research Scholar, Tilkamaji Bhagalpur
University, India
- Mr. Brijendra Nath Singh
Research Scholar, Department of Geography,
Faculty of Science Banaras Hindu University,
Varanasi, U.P., India
- Mr. Raies Ul Haq Ahmad Sikander
LL.B. Student, CLC
University of Delhi, India



- Mr. Sujit Nirman
B.A., LL.B. Student, National Law University,
Delhi, India
- Dr. Md. Moshir Rahman
Senior Lecturer, Department of Geography and
Environmental Science, University of
Development Alternative, Dhaka, Bangladesh
Dr. Md. Redwanur Rahman
Associate Professor, Institute of Environmental
Science, University of Rajshahi, Bangladesh.
- Mr. Bidyut Bora
Research Scholar, School of International
Studies, Jawaharlal Nehru University, New
Delhi, India.
- Mr. Pawan Kumar Bairwa
Research Scholar, School of International
Studies, Jawaharlal Nehru University, New
Delhi, India.
- Mr. Harshan Tee Pee
Ph.D. Scholar, School of Social Science, Tata
Institute of Social Sciences, Deonar, Mumbai,
India
- Mr. Stanzin Chostak
Ph.D. Scholar, Jamia Millia Islamia University,
New Delhi, India
- Dr. Gloria Erinma Orie
Practicing Advocate, Nigeria
- Mr. Ajay Arora
Research Scholar, Centre for the Study of Law
and Governance, Jawahar Lal Nehru University,
New Delhi, India
- Mr. Ghassem Mayah
Research Scholar
University of Zabol, Iran
- Mr. Hesamaddin Rahabri
Research Scholar
University of Zabol, Iran
- Mr. Esameil Shahsavandi
Research Scholar
University of Zabol, Iran
- Ms. Chandreshwari Minhas
Assistant Professor in Raffles University,
Neemrana, Rajasthan, India
- Mr. Sidhant S. Kondarwar
Assistant Professor, New Law College, Bharati
Vidyapeeth Deemed University, Pune, India
- Professor (Dr.) Rajni Malhotra Dhingra
Dean, Vivekananda Law School, (VIPS), New
Delhi, India
- Mr. Benoît Mayer
Ph.D. Candidate, National University of
Singapore, Singapore
- Dr. Shabnam
Assistant Professor, Law Centre II, University of
Delhi, India
- Ms. Arunima Sarkar
BBA LLB Student, University School of Law
and Legal Studies, GGSIP University, New
Delhi, India
- Mr. Akash Anand
Research Scholar, Faculty of Law, University of
Delhi, India



- Mr. Anil K. Dixit
Assistant Professor
Uttaranchal University, Dehradun, India
- Ms. Soumya Sushila Sahoo
Research Scholar, Centre for Security Studies,
School of International Studies, Central
University of Gujarat, Gandhinagar, India
- Ms. Roshni Duhan
Research Scholar, Department of Law, B.P.S.M.
University, Khanpur-Kalan, Sonapat, Haryana,
India
- Ms. Arpit Sharma
B.A. LL.B Student, Institute of Law, Nirma
University, India
- Professor (Dr.) Riccardo Pavoni
Professor of International and European Law,
University of Siena, Italy
- Mr. Architesh Panda
Scientist, Indian Rice Research Institute, New
Delhi, India
- Ms. Ritumbra Manuvie
Commonwealth Ph.D. Scholar, Department of
Politics and International Relations, School of
Social and Political Science, University of
Edinburgh, United Kingdom
Architesh Panda
Scientist, Indian Rice Research Institute, New
Delhi, India
- Dr. Puneet Pathak
Assistant Professor
Centre for Environmental Law, School for Legal
Studies and Governance, Central University of
Punjab, India
- Mr. Vijay Prasad Jayshwal
Kathmandu School of Law, Purbanchal
University, Nepal
- Dr. Liuyong
Professor of Law
Law School, Zhejiang University of Finance &
Economics, China
- Mr. Dian Agung Wicaksono
Constitutional Law Department, Faculty of Law,
Universitas Gadjah Mada, Bulaksumur, Sleman,
D.I. Yogyakarta, Indonesia
- Mr. Wahyu Yun Santosa
Environmental Law Department, Faculty of Law,
Universitas Gadjah Mada, Bulaksumur, Sleman,
D.I. Yogyakarta, Indonesia
- Dr. Vandana Mahalwar
Assistant Professor, Campus Law Centre,
University of Delhi, India
- Ms. Gurminder Kaur
Assistant Professor, Army Institute of Law,
Mohali, India
- Ms. Gurminder Kaur
Assistant Professor, Army Institute of Law,
Mohali, India
- Dr. Inderjeet Singh Sodhi
Head, Department of Public Administration
St. Wilfred's Post Graduate College, Jaipur, India
- Ms. Mukta Verma
Assistant Professor, Department of Law,
University of Allahabad, Uttar Pradesh, India
- Mr. Hyginus Uchenna Okoronkwo



Research Scholar, Faculty of Law, University of Delhi, India

- Ms. Upasana Koul
Research Scholar, Academy of International Studies, Jamia Millia Islamia University, New Delhi, India
- Mr. Q Man Ban
Research Scholar, Hanyang University, Seoul, South Korea
- Mr. Saru Arifin
Faculty of Law, Semarang State University, Kampus Sekaran, Gedung K, Gunungpati Semarang, Central Java, Indonesia
- Mr. Younes Charbgoo
Research Scholar, Faculty of Law, Jamia Millia Islamia, New Delhi, India
- Mr. Rishikesh Awasthi
Advocate, Supreme Court of India
- Mr. Govinda
Department of Biochemistry, MD University, Rohtak, India
- Mr. Mayank Vikas & Kanksha Mahadevia
Lawyers, Bar Council of Delhi, India
- (Dr.) Alka Chawla
Associate Professor, CLC
- Mr. S.K. Gupta
Associate Professor, CLC
- Dr. Vandana
Associate Professor, CLC
- Dr. Gunjan Gupta

Associate Professor, CLC

- Ms. Neha Aneja
Assistant Professor, CLC
- Mr. Rajender Sangwan
Advocate, Delhi High Court
- Mr. Devendra Maan
Coordinator, Spic Macay
- Ms. Debby Lalrinsangi Ralte
Assistant Professor, CLC
- Ms. Tushti Chopra
Assistant Professor, CLC
- Mr. Mizum Nyodu
Assistant Professor, CLC
- Ms. Namita Vashishta
Assistant Professor, CLC
- Mr. Jamshed Khan
Assistant Professor, CLC
- Mr. Dinesh Singh
Assistant Professor, CLC
- Dr. Poonam Verma
Assistant Professor, CLC
- Dr. Huma Khan
Assistant Professor, CLC
- Ms. Sanjivini, Raina
Assistant Professor, CLC
- Ms Harleen Kaur
Assistant Professor, CLC
- Ms. Shilpi
Assistant Professor, CLC



- Mr. Rohini Kumar
Assistant Professor, CLC
- Ms. Monica Chaudhary
Assistant Professor, CLC
- Mr. Vinod Chauhan
Assistant Professor, CLC
- Ms. Cheshta Dahiya
Assistant Professor, CLC
- Ms. Anju Sinha
Assistant Professor, CLC
- Mr. Santosh Kumar
Assistant Professor, CLC
- Mr. Rajiv Kumar Kamboj
Assistant Professor, CLC
- Mr. Vipul P. Sanghi
Assistant Professor, CLC
- Mr. Neeraj Kumar
Assistant Professor, CLC
- Ms. Namita Vashishta
Assistant Professor, CLC
- Mr. Inderjeet Santoshi
Assistant Professor, CLC
- Mr. Mandeep Kumar
Assistant Professor, CLC
- Mr. Amit Mishra
Assistant Professor, CLC
- Mr. Ajeet Singh
Assistant Professor, CLC
- Dr. Shashi Bala
Assistant Professor, CLC
- Vandna Mahalwar
Assistant Professor, CLC
- Mr. Moatoshi Ao
Assistant Professor, CLC
- Dr. V.K. Ahuja
Associate Professor
LC-II, University of Delhi
- Mr. Narender Bishnoi
Assistant Professor
LC-I, University of Delhi
- Mr. Sunil Kumar
Assistant Professor
LC-II, University of Delhi
- Ms. Khushboo Anand
Ph.D. Scholar, Faculty of Law
University of Delhi
- Mr. Varun Chhachhar
Assistant Professor
LC-I, University of Delhi
- Mr. S.K. Singh
Assistant Professor
LC-I, University of Delhi
- Ms. Nidhi
Ph.D. Scholar, Faculty of Law
University of Delhi
- Mr. Rajesh Kumar Dev
Assistant Professor, CLC
- Mr. Shakti Agarwal
Assistant Professor, CLC



ORGANISING COMMITTEE

Patron-In-Chief

Professor (Dr.) Dinesh Singh

Hon'ble Vice-Chancellor

University of Delhi

Patron

Professor (Dr.) Sudhish Pachauri

Pro-Vice-Chancellor

University of Delhi

Conference Director

Professor (Dr.) Usha Tandon

Professor-In-Charge

Campus Law Centre

Conference Joint-Directors

Professor (Dr.) S.C. Raina

Professor (Dr.) P.S. Lathwal

Professor (Dr.) Kamala Sankaran

Conference Secretariat

Dr. Alka Chawla, Associate Professor

Dr. Raman Mittal, Associate Professor

Mr. S.K. Gupta, Associate Professor

Dr. Vandana, Associate Professor

Dr. Gunjan Gupta, Associate Professor

Ms. Neha, Assistant Professor

Conference Coordinators

Dr. Shashi Bala, Assistant Professor

Mr. Moatoshi Ao, Assistant Professor

Conference Members

Mr. Neeraj Kumar, Assistant Professor

Mr. Vipul Pankaj Sanghi, Assistant Professor

Dr. Vandana Mahalwar, Assistant Professor

Ms. Cheshta Dahiya, Assistant Professor



PROGRAM DETAILS

Campus Law Centre

University of Delhi

International Conference

On

Mitigation of Climate Change: Law, Policy and Governance

Inaugural Session

25th April, 2014

9.30 a.m.- 10.15 a.m.

Venue: Auditorium

9.30 a.m. - 9.32 a.m.

Lighting of Lamp and Felicitation

9.32 a.m.- 9.37 a.m.

Welcome Address and Introductory Remarks

Professor (Dr.) Usha Tandon

Professor-In-Charge, CLC and Conference Director

9.37 a.m.- 9.45 a.m.

Address by Guest of Honour

Ms. Pinky Anand

Senior Advocate, Supreme Court of India

9.45 a.m.- 10.00 a.m.

.Inaugural Address

Hon'ble Mr. Justice Swatanter Kumar

Chairperson, National Green Tribunal, ND

10.00 a.m.- 10.10 a.m.

Presidential Address

Professor (Dr) Dinesh Singh

Hon'ble Vice-Chancellor, University of Delhi

10.10 a.m.-10.15 a.m.

Vote of Thanks

Professor (Dr.) S.C. Raina

Professor, CLC

10.15 a.m.-11.00 a.m.

High Tea



Campus Law Centre

University of Delhi

International Conference

On

Mitigation of Climate Change: Law, Policy and Governance

Valedictory Session

27th April, 2014

4.00 p.m.- 5.30 p.m.

Venue: Auditorium

4.00 p.m.- 4.05 p.m.

Felicitation of Guests

4.05 p.m.- 4.15 p.m.

Welcome Address and Closing Remarks

Professor (Dr.) Usha Tandon

Professor-In-Charge, CLC and Conference Director

4.15 p.m.- 4.20 p.m.

Presentation of Conference Report

Mr. Moatoshi Ao

Assistant Professor, CLC; Conference Coordinator

4.20 p.m.-4.30 p.m.

Address by Guest of Honour

Mr. Sidharth Luthra

Additional Solicitor General of India

4.30 p.m.- 4.40 p.m.

Address by Guest of Honour

Professor (Dr.) J.L. Kaul

Professor, CLC; currently Vice-Chancellor, Vikram University,
Ujjain

4.40p.m.-5.00p.m.

Valedictory Address

Hon'ble Mr. Justice Arjan Kumar Sikri

Judge, Supreme Court of India

5.00p.m.-5.15 p.m.

Presidential Address

Mr. Mohan Parasaran



Campus Law Centre

PROCEEDINGS

of
International Conference on
Mitigation of Climate Change : Law, Policy and Governance
25th - 27th April, 2014

5.15 p.m.- 5.20 p.m.	Solicitor General of India
5.20 p.m.-5.30 p.m.	Distribution of Certificates
	Vote of Thanks
	Mr. S.K. Gupta
	Associate Professor, CLC
5.30 p.m.- 6.00p.m.	High Tea



Working Sessions

Schedule of April 25th, 26th & 27th, 2014

<p>Day One Friday, April 25, 2014</p>	<p>08:00 a.m. – 9:30 a.m. Registration of Delegates 09:30 a.m. – 10:15 a.m. Inaugural Session 10:15 a.m. – 11:00 a.m. High Tea 11:00 a.m. – 12:45 p.m. WorkingSession – I 12:45 p.m. – 02:15 p.m. Lunch 2:15 p.m. – 4:00 p.m. WorkingSession – II 04:00 p.m. – 04:30 p.m. Tea Break 06:00 p.m. Boarding of Bus from CLC to Dinner Venue</p> <p>07:00 p.m. – 08:30 p.m. Welcome Dinner Hosted by: Mr. Mohan Parasaran Solicitor General of India</p> <p>Venue: Desire Hall Hotel Le Meridien Windsor Palace New Delhi, India</p>
<p>Day Two Saturday, April 26, 2014</p>	<p>10:00 a.m. – 11:45 a.m. WorkingSession – III 11:45 a.m. – 12:00 p.m. Tea Break 12:00 p.m. – 01:30 p.m. WorkingSession – IV 01:30 p.m. – 02:30 p.m. Lunch 02:30 p.m. – 04:00 p.m. WorkingSession – V 04:00 p.m. – 04:15 p.m. Tea Break 04:15 p.m. – 05:45 p.m. WorkingSession – VI 05:45 p.m. – 06:00 p.m. Tea Break</p> <p>06:00 p.m. – 07:00 p.m. Cultural Event: Qawwali by Nizami Brothers (Junior) Sponsored by: Devendra Maan, Coordinator Spic Macay</p>
<p>Day Three Sunday, April 27, 2014</p>	<p>09:30 a.m. – 11:15 a.m. WorkingSession – VII 11:15 a.m. – 11:30 a.m. Tea Break 11:30 a.m. – 01:15 p.m. WorkingSession – VIII 01:15 p.m. – 02:15 p.m. Lunch 02:15 p.m. – 04:00 p.m. WorkingSession – IX 04:00 p.m. – 05:30 p.m. Valedictory Session 05:30 p.m. – 06:00 p.m. High Tea</p>



Working Session - I

Friday, April 25, 2014

11:00 a.m. – 12:45 p.m.

Venue: Seminar Hall, CLC

Understanding Climate Change Causes

Chairperson: Professor (Dr.) S.C. Raina, *Professor CLC*

Rapporteur: Dr. Shashi Bala, *Assistant Professor, CLC*

- (i) Landfills Contributions to Green House Gas Emission on Climate Change - Its Present Status Management in India
T. Selvaraj Assistant Professor, Tamil Nadu Veterinary and Animal Sciences University, Tamil Nadu, India
D. Dinesh Scientist, CSWCRTI Research Centre, Tamil Nadu, India
- (ii) Renewable Energy: A Recourse to Control Human Induced Climate Change
Ranidipa Ghosh, Law Clerk-Cum-Research Assistant, Calcutta High Court, West Bengal, India
- (iii) Understanding Climate Change Causes
Mrs. Nellu kumari Ram Research Scholar and Teacher, India
- (iv) Global Climate Change: An Analysis
Brijendra Nath Singh Research Scholar, Department of Geography, Faculty of Science Banaras Hindu University, Varanasi, U.P., India
- (v) Armed Conflict and Environment: A Study of Jammu & Kashmir State
Raies Ul Haq Ahmad Sikander, LL.B. Student, Campus Law Centre, University of Delhi, India
- (vi) Industrialization and Greenhouse Emissions- A Comparative study of North America and Asia
Sujit Nirman B.A., LL.B. Student, National Law University, Delhi, India



Working Session - II

Friday, April 25, 2014

02:15 p.m. – 04:00 p.m.

Venue: Seminar Hall, CLC

Impact of Climate Change: Key Concerns

Chairperson: Professor (Dr.) Manoj Kumar Sinha, *Director, Indian Law Institute, New Delhi*

Rapporteur: Mr. Vipul Pankaj Sanghi, *Assistant Professor, CLC*

- (i) Impacts of Climate Change on Fishermen in the Coastal Zone of Bangladesh: A Study after Three Devastating Cyclones
Dr. Md. Moshir Rahman, Senior Lecturer, Department of Geography and Environmental Science, University of Development Alternative, Dhaka, Bangladesh
Dr. Md. Redwanur Rahman Associate Professor, Institute of Environmental Science, University of Rajshahi, Bangladesh.
- (ii) The Disaster-Pyramid: A Management Approach Impact of Climate Change: Key Concerns Managing Concurrent Hazards
Ms. Maria Auma, Research Scholar, New Charter University, San Francisco, USA
- (iii) Impact of Climate Change on Wetlands in India: Perspectives on Concerns and Action Plans
Dr. Mohd. Zafar Mahfooz Nomani, Associate Professor, Department of Law, Aligarh Muslim University, India.
- (iv) Climate Change and its Impacts on Vulnerable Sections in India
Bidyut Bora & Pawan Kumar Bairwa Research Scholars, School of International Studies, Jawaharlal Nehru University, New Delhi, India.
- (v) Vulnerability, Damages and Post-shock Recovery of Natural Disaster: Study of a Village Affected by Cyclone Thane in Cuddalore District, Tamil Nadu, India
Harshan Tee Pee, PhD Scholar, School of Social Science, Tata Institute of Social Sciences, Deonar, Mumbai, India.
- (vi) Impacts of Climate Change on Local Livelihoods in the Cold Desert of the Western Indian Himalayan Region of Ladakh
Stanzin Chostak, Ph.D Scholar, Jamia Millia Islamia University, New Delhi, India



Working Session - III

Saturday, April 26, 2014

10:00 a.m. – 11:45 a.m.

Venue: Seminar Hall, CLC

UNFCCC, Kyoto Protocol and Beyond: Key Legal Issues

Chairperson: Dr. Inderjeet Singh Sodhi, *Head, Department of Public Administration, St. Wilfred's Post Graduate College, Jaipur*

Rapporteur: Mr. Moatoshi Ao *Assistant Professor, CLC*

- (i) The Clean Development Mechanism (CDM) and the Challenge of Compliance with the CDM Rules in Nigeria
Gloria Erinma Orie Practicing Advocate, Nigeria
- (ii) Revisiting Global Climate Change Negotiations: India and COPs
Ajay Arora Research Scholar, Centre for the Study of Law and Governance, Jawahar Lal Nehru University (JNU), New Delhi, India
- (iii) Organization of Petroleum Exporting Countries (OPEC) versus the International Kyoto Protocol in the Persian Gulf Region: Problems and Prospects
Ghassem Mayah, Hesamaddin Rahabri, Esameil Shahsavandi, Research Scholars, University of Zabol, Iran
- (iv) Analysing Kyoto Protocol and its Negotiation Process with Special Emphasis on its Compliance System
Chandreshwari Minhas, Assistant Professor in Raffles University, Neemrana, Rajasthan, India
- (v) UNFCCC, Kyoto Protocol & Developing Countries: Human Solidarity in a Divided World
Mr. Sidhant S. Kondarwar, Assistant Professor, New Law College, Bharati Vidyapeeth Deemed University, Pune, India
- (vi) The Kyoto Protocol: An Indirect Benefit to the Developed World
Professor (Dr.) Rajni Malhotra Dhingra, Dean, Vivekananda Law School, (VIPS), New Delhi, India



Working Session - IV

Saturday, April 26, 2014

12:00 p.m. – 01:30 p.m.

Venue: Seminar Hall, CLC

UNFCCC and International Environmental Principles

Chairperson: Professor (Dr.) Usha Tandon, *Professor-in-Charge, CLC*

Rapporteur: Ms. Cheshta Dahiya, *Assistant Professor, CLC*

- (i) Conceiving the Rationale for International Climate Law
Benoît Mayer, PhD Candidate, National University of Singapore
- (ii) The No-Responsibility for Climate Change 'Under Common but Differentiated Responsibility'
Dr. Shabnam, Assistant Professor, Law Centre II, University of Delhi, India
- (iii) Climate Change, Migration and Environmental Justice
Anam Soomro, Independent Researcher & Policy Officer, Hassan Trust, Member of Sindh Bar Council, Karachi, Pakistan
- (iv) Climate Change and Human Migration: A Quest for Cooperation, “Glo-cally”
Arunima Sarkar, BBA LLB Student, University School of Law and Legal Studies, GGSIP University, New Delhi, India
- (v) UNFCCC and Precautionary Principle
Akash Anand, Research Scholar, Faculty of Law, University of Delhi, India



Working Session - V

Saturday, April 26, 2014

02:30 p.m. – 04:00

Venue: Seminar Hall, CLC

The Climate Change and the International Trade Law And

Impact of Climate Change: Key Concerns

Chairperson: Professor (Dr.) P.S. Lathwal, *Professor, CLC*

Rapporteur: Ms. Harleen Kaur, *Assistant Professor, CLC*

- (i) The Climate Change and International Trade: Legal Perspective
Anil K. Dixit, Assistant Professor, Uttarakhand University, Dehradun, India
- (ii) Climate Financing: A Discussion of the Major Issues between North-South Regions
Soumya Sushila Sahoo, Research Scholar, Centre for Security Studies, School of International Studies, Central University of Gujarat, Gandhinagar, India
- (iii) Harnessing Climate Change Mitigation Potential of Forests in India: Effectiveness of REDD
Neha Sharma, Research Scholar, University of Delhi, India
- (iv) Depletion of Ozone Layer and Global Warming: A Study of Impacts of Climate Change
Roshni Duhan, Research Scholar, Department of Law, B.P.S.M. University, Khanpur-Kalan, Sonapat, Haryana, India
- (v) A South African Perspective in the Climate Change Debate
Arpit Sharma, B.A. LL.B Student, Institute of Law, Nirma University, India



Working Session - VI

Saturday, April 26, 2014

04:15 p.m. – 05:45 p.m.

Venue: Seminar Hall, CLC

The Climate Change and Human Rights Law

Chairperson: Professor (Dr.) Afzal wani Professor,

School of Law and Legal Studies, GGSIP University, New Delhi

Rapporteur: Mr. Neeraj Kumar, Assistant Professor, CLC

- (i) Climate Change and Human Rights: A Viable and Unavoidable Relationship
Riccardo Pavoni, Professor of International and European Law, University of Siena, Italy
- (ii) Re-structuring the United Nations Framework Convention on Climate Change based on the Right of Nature – A Nature Rights-based Approach to Combat Climate Change
Amar Roopanand Mahadew, Human Rights Law Lecturer, University of Mauritius
- (iii) Governance of Climate Change Induced Migrations in India
Ritumbra Manuvie, Commonwealth Ph.D. Scholar, Department of Politics and International Relations, School of Social and Political Science, University of Edinburgh, United Kingdom
Architesh Panda, Scientist, Indian Rice Research Institute, New Delhi, India
- (iv) **Climate Change and Human Rights Dr. Puneet Pathak**, Assistant Professor, Centre for Environmental Law, School for Legal Studies and Governance, Central University of Punjab, India
- (v) State Responsibility for Global Climate Change: A Case Study of Nepal with Special Focus on Displacements of Indigenous Groups
Vijay Prasad Jayshwal, Kathmandu School of Law, Purbanchal University, Nepal



Working Session - VII

Sunday, April 27, 2014

09:30 a.m. – 11:15 a.m.

Venue: Seminar Hall, CLC

Comparative / Domestic Climate Change Law and Policy

And

The Climate Change and Human Rights Law

Chairperson: Professor Rajiv Khanna Former Professor, CLC

Rapporteur: Ms. Anju Sinha, Assistant Professor, CLC

- (i) Current Achievements and Future Challenges: an Appraisal of China's Newly Launched Regional Carbon Emission Trading System
Dr. Liuyong, Professor of Law, Law School, Zhejiang University of Finance & Economics, China
- (ii) The Local Government Policy to Perform Environmental Performance in REDD+ Program in the Context of Unitary State of Indonesia
Dian Agung Wicaksono, Constitutional Law Department, Faculty of Law, Universitas Gadjah Mada, Bulaksumur, Sleman, D.I. Yogyakarta, Indonesia
Wahyu Yun Santosa, Environmental Law Department, Faculty of Law, Universitas Gadjah Mada, Bulaksumur, Sleman, D.I. Yogyakarta, Indonesia
- (iii) Food Insecurity in the Face of Climate Change
Dr. Vandana Mahalwar, Assistant Professor, Campus Law Centre, University of Delhi, India
- (iv) Protection of Human Rights Qua Climate Change
Ms. Gurminder Kaur, Assistant Professor, Army Institute of Law, Mohali, India
- (v) Mitigation of Climate Change: Exploring Laws and Policies of China and India in Changing Paradigm
Amrendra Kumar, Research Scholar, Center for International Legal Studies, School of International Studies, Jawaharlal Nehru University, New Delhi, India



Working Session - VIII

Sunday, April 27, 2014

11:30 a.m. – 01:15 p.m.

Venue: Seminar Hall, CLC

Comparative / Domestic Climate Change Law and Policy

Chairperson: Professor (Dr.) J.L. Kaul

Professor CLC; Currently Vice-Chancellor, Vikram University, Ujjain

Rapporteur: Mr. Ajeet Singh, Assistant Professor, CLC

- (I) Climate Change Initiatives and Strategies In India—Need For Comprehensive Policy And Governance

Dr. Inderjeet Singh Sodhi, Head, Department of Public Administration St. Wilfred's Post Graduate College, Jaipur, India

- (ii) Mitigating Climate Change: Role of Constitution, Judiciary and Executive in Present Scenario

Ms. Mukta Verma, Assistant Professor, Department of Law, University of Allahabad, Uttar Pradesh, India

- (iii) The Role of Nigerian Judiciary in Mitigating Climate Change and Post-2015 Lessons for Other Developing Countries

Hyginus Uchenna Okoronkwo, Research Scholar, Faculty of Law, University of Delhi, India

- (iv) Climate Change and Sustainable Development- An Insight into India's Approach

Upasana Koul, Research Scholar, Academy of International Studies, Jamia Millia Islamia University, New Delhi, India

- (v) Climate Change Laws in India – Need for Change in Legal Climate?

Professor Swatee Yogesh, Vice-Principal, Balaji Law College, Pune, India

- (vi) Judicial Activism and Climate Change in South Korea

Q Man Ban, Research Scholar, Hanyang University, Seoul, South Korea



Working Session - IX

Sunday, April 27, 2014

02:15 p.m. – 04:00 p.m.

Venue: Seminar Hall, CLC

Comparative / Domestic Climate Change Law and Policy

Chairperson: Prof. Riccardo Pavoni, *Professor of International and European Law University of Siena, Italy*

Rapporteur: Dr. Vandana Mahalwar
Assistant Professor, CLC

- (i) Indonesian Climate Law and Institutional Arrangement
Saru Arifin, Faculty of Law, Semarang State University, Kampus Sekaran, Gedung K, Gunungpati Semarang, Central Java, Indonesia
- (ii) The Role of Social Protection Mechanisms in Climate Change Mitigation in India
Younes Charbgoo, Research Scholar, Faculty of Law, Jamia Millia Islamia, New Delhi, India
- (iii) A Study of Indoor Air Pollution and its Impact on Health in India
Shalini Singh Kashyap, Research Fellow, Agricultural Economics Research Centre, Delhi School of Economics, Delhi University, Delhi, India
- (iv) Environment Laws: A different Perspective and Conflicting Execution
Rishikesh Awasthi, Advocate, Supreme Court of India
- (v) Environmental Protection Acts for Protection of Ozone, Biodiversity and Climate Change: A-Review
Govinda, Department of Biochemistry, MD University, Rohtak, India
- (vi) Nuclear Plant on Mountain Top: Whether an Ecologically Sustainable Answer to India's Energy Security
Mayank Vikas & Kanksha Mahadevia Lawyers, Bar Council of Delhi, India



Campus Law Centre

PROCEEDINGS

of

International Conference on

Mitigation of Climate Change : Law, Policy and Governance

25th - 27th April, 2014

Glimpses of the Conference



Inaugural Session



Arrival of Vice-Chancellor Professor Dinesh Singh



Inaugural Session



Arrival of Justice Swatanter Kumar



Arrival of Ms. Pinky Anand, Sr. Advocate



Inaugural Session



Vice-Chancellor lighting the lamp



Dignitaries on the Dias



Inaugural Session



Felicitation of Ms. Pinky Anand, Sr. Advocate



Audience



Inaugural Session



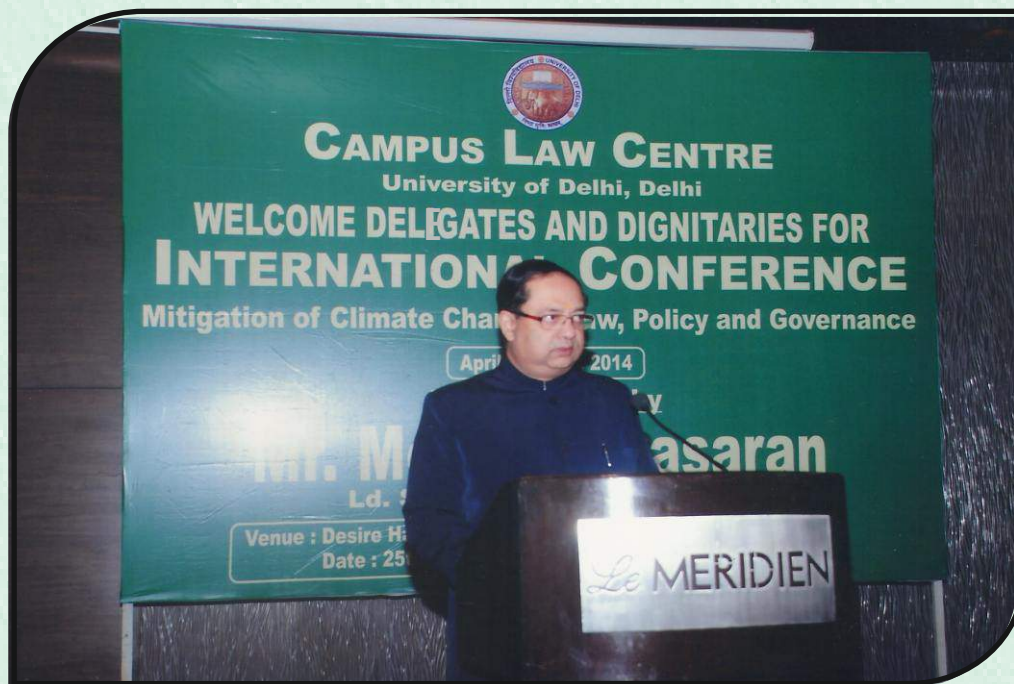
Vice-Chancellor addressing the Conference



Justice Swatanter Kumar addressing the Conference



Welcome Dinner



Mr. Mohan Parasan, SGI, addressing the guests



Justice A.K. Sikri, Justice Jayant Nath With SGI



Welcome Dinner



Felicitation of Justice Swatanter Kumar



Felicitation of Justice Jayant Nath



Welcome Dinner



**Felicitation of Major Gen. Vatsop Namgyel and
Mr. Lee Joon- Gyu**



Felicitations of Mr. Tokunbo Falon



Campus Law Centre

PROCEEDINGS
of
International Conference on
Mitigation of Climate Change : Law, Policy and Governance
25th - 27th April, 2014

Welcome Dinner



Delegates with SGI Mr. Mohan Parasaran



Welcome Dinner



Dignitaries with SGI Mr. Mohan Parasaran



Welcome Dinner



Distinguished guests with SGI Mr. Mohan Parasaran



Welcome Dinner



Distinguished guests



Welcome Dinner



PIC interacting with High-Commissioners



PIC with SGI



Welcome Dinner



Enjoying the food



CLC Faculty



Welcome Dinner



CLC Faculty



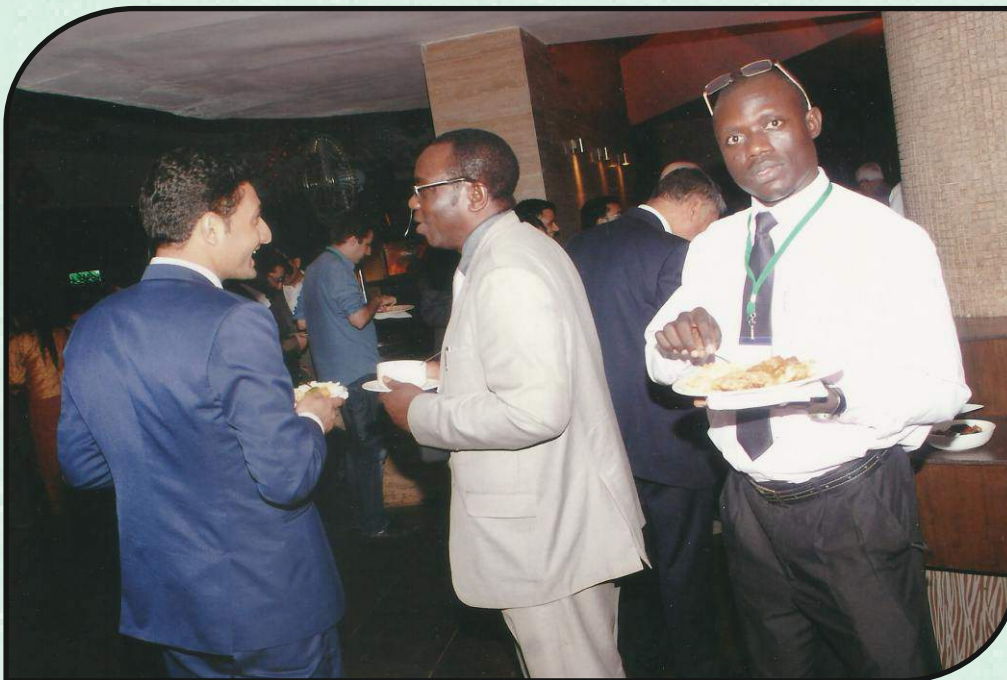
CLC Faculty and Students



Welcome Dinner



Enjoying the food



Enjoying the food



Working Session



Professor P.S. Lathwal, the Chairperson



Professor Afzal Wani, the Chairperson



Working Session



Seminar Hall packed with delegates



Delegates



Working Session



Delegates making presentations



Working Session



Delegates making presentations



Working Session



Delegates making presentations



Working Session



Professor Afzal Wani conducting the session



Professor P.S. Lathwal Conducting the session



Working Session



Professor Usha Tandon, the Chairperson



Professor Usha Tandon conducting the session



Working Session



Delegates



Delegates



Working Session



Delegates



Delegates



Working Session



Delegates



Delegates



Working Session



Delegates



Professor Riccardo Pavoni chairing the session



Working Session



Delegates



Delegates



Working Session



Delegates



Delegates



Working Session



Student Volunteers



Working Session



Delegates



Delegates



Working Session



Delegates



Delegates



Working Session



Professor Manoj Kumar Sinha chairing the session



Delegates



Working Session



Professor Rajiv Khanna chairing the session



Delegates



Working Session



Delegates



Professor Manoj Kumar Sinha addressing the audience



Working Session



Delegates



Professor J.L. Kaul chairing the session



Working Session



Professor S.C. Raina chairing the session



Delegates



Cultural Event



Nizami Brothers



Felicitatation of Singers



Cultural Event



Felicitation by Advocate Rajender Sangwan



Audience



Cultural Event



Audience



Audience



Valedictory Session



Justice A.K. Sikri addressing the Conference



Felicitation of Justice A.K. Sikri



Valedictory Session



Felicitation of SGI Mr. Mohan Parasaran



Felicitation of Addl. SGI Mr. Sidharth Luthra



Valedictory Session



Felicitation of Professor J.L. Kaul



Audience



Valedictory Session



Audience



Audience



Distribution of Certificates by Justice A.K. Sikri



Dr. Liuyong receiving the certificate



Mr. Benoit Mayer receiving the certificate



Valedictory Session



Dr. Md. Redwanur Rahman receiving the certificate



Mr. Vijay Jayshwal receiving the certificate



Valedictory Session



Mr. Saru Arifin receiving the certificate



Mr. Dian Agung Wicaksono receiving the certificate



Valedictory Session



Mr. Q. Man Ban receiving the certificate



Justice A.K. Sikri and Professor Usha Tandon



Valedictory Session



Mr. Mohan Parasaran, SGI addressing the Conference



Mr. Mohan Parasaran and Mr. Sidharth Luthra